BILD 3 Organismal and Evolutionary Biology Winter 2024

Welcome to BILD 3, In Person!
This class is designed to be in person, so you should plan on attending.

Dr. Shannon Butler (she, her)
5-6:20pm Tu/Th Galbraith 242
S3butler@ucsd.edu (Subject line "BILD 3")

Format of course: This course is in person, but there are many assignments, exams, and office hours online so you will need access to the internet and Zoom. You need to go to the section you registered, you may not switch. If the format on any given day needs to change from in person to remote due to circumstance (illness of instructor, campus emergency), you will be notified as soon as possible.

iClickers: Yes, you do need an iclicker for this class! It is worth points. You can find less expensive second-hand iclickers on ebay or other resale sites, <u>any version will do</u>. You must register your iClicker on Canvas each quarter! Two students may not share the same iclicker. **The app for iclickers will not be supported, only physical iclickers.** If you choose not to have one, you can see in the grading scheme how it will affect your grade. You need to register your clicker here: https://www.iclicker.com/ (previous quarters you registered on Canvas, this is new!)

Course Overview:

In this course we will learn about principles of evolutionary theory, classification, ecology, and behavior. We will also have a phylogenetic synopsis of the major groups of organisms from viruses to primates.

Course Objectives:

At the end of this course you will be able to....

Core Concepts:

- Describe how basic principles of evolution can lead to the production of new phenotypes at the molecular level *(Information flow & Exchange)*
- Identify the evolutionary relationships among major taxa on earth *(Evolution)*
- Describe adaptations that allowed plants and animals to move onto land *(Structure & Function)*
- Describe how biotic and abiotic factors can interact with each other to affect climate & weather, as well as impose selective pressures on populations *(Systems)*

Competencies:
- Recognize the stochastic nature of biological processes *(Modeling & Simulation)*
- Describe factors that affect nutrient cycling and lead to climate change *(Transformation of Energy & Matter)*
- Identify which lines of evidence support a scientific claim *(Communicate & Collaborate)*
- Use quantitative data to answer biological questions *(Quantitative Reasoning)*
- Describe how new knowledge is constructed in Science *(Process of Science)*
- Describe ways that Science interacts with non-Science disciplines in relation to issues like climate change and environmental justice *(Interdisciplinary Nature of Science, Science & Society)*

A more detailed list of learning objectives for each module can be found here: Bild 3 Learning Objectives

Office hours: I am happy to meet with you during my Office hours. Stop by to get help, say hi, or to meet other students. My office hours will be on Zoom this quarter. You can find my office hour schedule here: 📅 BILD 3 Winter 24 Road Map . I know you may have class during my office hours, which is why I hold office hours DURING class time for the class period before the Exam so that I know it fits in your schedule (unless you choose to double book your classes). Here is how to find me on Zoom:

> Bild 3 Zoom link
> Meeting ID: 967 0847 4735
> Password: cat

The **IAs also have Office hours** each week, you can find an up to date schedule here:
📅 **BILD 3 Winter 24 Road Map**
All office hours are on Zoom, BUT, some IAs may also be in person while on zoom.

Communication: I will send out announcements via Canvas "Announcements", monitor them daily! The best way to contact me is during my Office hours.

I encourage you to attend *Zoom office hours rather than email the Instructor or the IA'*s! One, this is how we can get to know each other. Two, we can better explain the material in person. Maybe other students have a similar question and we can help each other learn!
But, if you do email us, make sure that the *Subject is "BILD 3".* Examples of good reasons to email us are: You have some sort of emergency that causes you to miss an exam; you have some accommodation from OSD or would like to talk about an accessibility issue, etc. These are good reasons to email and I can have a follow up conversation with you on Zoom if needed.

I am slow to reply to Canvas messages, they are harder to sort. If there is extra time at the end of class, I will let you all know and we can chat, but before class when I am trying to set up the projector is not a good time to ask me questions.

IA contact Info: You can find IA's emails here: (same for the IA's! Try to ask them questions during discussions and their office hours before trying to email.)
⊞ BILD 3 Winter 24 Road Map

Textbook: The textbook for this course is <u>not required</u>, but if you find reading a textbook helpful, I loosely base the materials off of these chapters in the 11th Edition of Campbell's Biology (though earlier versions are quite similar). I do not cover all the material in each chapter; use the learning objectives to guide your study and refer to the book as a reference (though it is not essential). At this time, we unfortunately do not have access to course Reserves. I will let you know if this changes. There is an optional reading guide posted on Canvas. **If you are choosing between an iClicker and a book, get the iClicker**

Supplemental Instruction (SI) Session: SI sessions are a great way to get extra practice and meet classmates to study with! Dr. B does NOT run these sessions, so you should contact your SI leader with any questions about the SI session. Here is the website for SI session info:
https://aah.ucsd.edu/supplemental-instruction/index.html

<mark>I will replace this with this quarters specific SI info when available.</mark>

Technology: You need to be able to access Canvas (https://canvas.ucsd.edu/) and the internet to complete this course. You will likely be able to do most things from a smart phone, though it may be ergonomically challenging to do this the whole quarter. There are apps for Zoom, Canvas, and Google Drive which will be useful. You can access Canvas on your phone! Download the Canvas App. Using the Canvas App is the back up plan for taking Exams if your internet or computer fails. Make sure you do this before the first exam!

Canvas: I cannot add students to Canvas. You need to contact IT Email servicedesk@ucsd.edu Or call Phone: (858) 246-4357. I cannot help you get registered in Canvas or add you manually; it is out of my control and you need to go through IT and register properly.

How this class will work:

Activities during Lecture time: Lectures are in person. Attendance is highly recommended, and we use iclickers to promote engagement. You can earn up to 15

points from iclickers, and you will get ALL 15 of these points if you accumulate 65% of the iclicker points across the quarter. This means you have plenty of flexibility*** to miss class if you are ill or have an emergency. Do not attend lectures if you are ill or get a red "thumbs down" from the symptom checker. Follow all UCSD covid guidelines. See the **"How exactly do Participation points work?"** section for more explanation. I will NOT accept clicker answers via paper. Please feel free to raise your hand during class to ask questions!

Discussion sections: "Discussion activities" will occur during your section time, In Person. Each Discussion is worth 5 points for completing and actively participating in the activity in section. **You may NOT change sections or attend another section for any reason.** BUT you can miss 3* (of 10) before your grade even starts to be affected. IA is responsible for marking your points, they will enter them in Canvas within 2 school days of the section occurring. **You MUST contact them via email within 4 school days after the discussion occurred if there are any mistakes.** If you do not follow up in a timely manner, **you might not get your points later.** This is your responsibility to follow up on. Contact me (Dr. B) only if your IA doesn't respond within a week.

To **participate** in discussions, you must be on task and talking with your group members, and physically in the room the whole time (if you need to leave briefly and occasionally to use the restroom, please do so). Your group must share when called on. If you are off task or not participating, or not in the room, you will not get points.

If the grad IA is sick but well enough to teach on Zoom, then participation requires: Sharing your screen, speaking into a microphone, and working on a collaborative document.

You may not under any circumstances work asynchronously or alone for discussion. If you try to turn in a discussion assignment but were not present in the discussion to complete it, you will not receive credit.

During discussion, you must work with your group. You will form groups the first week. It is your responsibility to find your groups and work together. You must be active in this process, it is not the TAs responsibility to make sure you find your groups. We will use cardstock to write out names to form groups.

Please be on time for Discussion. It is disruptive to others if you are late (unless you have an OSD accommodation). If you are late, you will miss a proportional amount of points when the IAs are taking attendance. If you are late, please discreetly join your groups and do not disrupt the lesson.

*If the number of available discussion opportunities changes you will be notified as soon as possible. These misses include the first week! If you enroll late, you are using one of your misses.

Office Hours/Questions & Meetings with Dr. Butler: To ask questions about lecture, course material, assignments, etc: I will be available every week **During the office hours listed on the schedule on Zoom** to answer questions. THIS is the BEST way to get a hold of me! If you need to discuss something privately about a personal issue, we can use a break out room. This is an acceptable thing to email me about, to make time to discuss a private manner during or around OH. If you cannot make this time then please email me and we will arrange another way to communicate, or come to my Q&As during the class period that are for exams.

Office Hours with IAs: You can go to ANY IAs office hours, not just your IA. One of the IAs even has OH right after lecture time. This is also a great way to meet other students to study with.

Exams: Exams are online, but they are to be done ALONE without notes or other resources. You need to take exams synchronously (within the larger time window indicated on the schedule) unless you have an emergency or natural disaster. You need to contact me as soon as reasonably possible for these reasons. Exam dates are posted in the schedule 📅 BILD 3 Winter 24 Road Map .

Lecture Checks: After each lecture, there is a short lecture assignment on Canvas. You need to do MOST of these to get full credit (i.e. you can miss ~4). These assignments are meant to keep you on track and give us feedback about student understanding. They are also opportunities for you to see questions that may appear on an exam. The due dates for all lecture checks are on Canvas and they must be submitted **on time** for credit. If they are late, you will miss those points. But note the point cap, you can miss some. Do not resubmit assignments after the due date if you already turned them in on time! Canvas will automatically mark this as late.

Slides and course materials: I will be using Canvas to post course material and slides. We will also occasionally use google slides/sheets/docs for collaborative work. Discussion materials will also be on Canvas.

Podcasting: I do Podcast the class and it should appear in the media gallery within 48 hours of a lecture being over. When we are to watch pre-recorded lectures, they will also be available on Canvas ahead of time.

Schedule/Roadmap: 📗 **BILD 3 Winter 24 Road Map** I will do my best to stick to the schedule in this syllabus, but there may be slight changes (announced ASAP) due to circumstances that are unforeseeable and out of my control. I appreciate your flexibility and patience in advance. You will be assigned to watch some lecture content online, and I will let you know as we go.

Grading

You can receive up to 330 points in this class. The number of points that you receive will be divided by the maximum number of points possible to calculate your grade as a percentage and use these cut offs for assigning letter grades. **If we do not get to all of the activities or I have to make slight changes, the denominator and/or point caps will be adjusted.** I use an excel formula to calculate total grades, I do not round. Canvas does not display the total grade because it cannot do the point caps I have in the grading scheme.

Grading scheme	Quantity	points per	Points towards grade	% of grade
Lecture checks	23	3	55	17%
iClickers	get >=65% of points		15	5%
Discussions	10	5	35	11%
Exams (drop lowest IF >50%)	4	75	225	68%
		Total	330	100%
*if any exam is <50%, then your 4 exams will be AVERAGED and weighted out of 225				

Cut offs			
A >=92 %	C+ >=78 %	P	>=70%
A- >=90%	C >=72 %	NP	<70%
B+ >=88 %	C- >=70 %		
B >=82 %	D >=60 %		
B- >=80 %	F <60%		

If you are ill or unable to do certain activities please **use the built in flexibility**. If you use up your flexibility due to non-emergencies, you may run out of it for an actual emergency. If you are sick for a long time, such as you are unable to do schoolwork for 2 weeks, it is possible to be given an extension on a case by case basis, but talk to me ASAP if something catastrophic happens. I can't just give you points at the end of the quarter if you miss a large chunk of the class. The sooner we talk, the easier it will be to get back on track. Always email me ASAP if you miss an exam due to an emergency.

Discussion Board: There will periodically be optional discussion boards, 5 for the whole quarter. They will be located in the modules. They will be up for several days and be due on or after the date of that lecture check. I will not accept late extra credit for any reason. The (up to) 5 points from the Extra credit can **fill in missed DI points**, but not above the point cap in that category. They do not go towards overall grade, just that category.
Other "extra" credit opportunities will be posted in the Announcements if they arise.

Classroom Behavior: Please avoid engaging in distracting behavior in class. This includes scrolling on social media, working on other assignments, talking when I am talking, etc. If you need to use the restroom, feel free to go do that. If you need to use a fidget toy, make sure it is a silent one. If you know you need to leave early, try to sit at the end of a row. You do not need to come tell me that you need to leave early, just quietly leave.

Health and safety: Do not come to class if you feel unwell, are coughing, or have tested positive for Covid. Follow all university covid protocols. Do not sit on the floor or block any walkways or doorways. **Leave scooters and bikes OUTSIDE the building,** they are a tripping hazard and can pose a danger if we need to evacuate. A certain section of the room will be for those who want to wear a mask. Please only sit in this designated area if you are willing to wear a mask.

More information about Exams:
Exams will be given online. The exams will be part Multiple Choice/Select All that apply, and part Free Response. They will not be explicitly cumulative, BUT some concepts are inherently cumulative. Exams are NOT open note/open book, unless you are specifically instructed to do so. I will give you time limits that will make it difficult to have time to look up all the answers, but enough time to complete the questions. I have the ability to run your essay questions through "turn-it-in" to detect plagiarism, which is academic dishonesty and will be dealt with accordingly according to UCSD's academic integrity policy. I also have the ability to monitor Chegg and online "tutoring" sites, live, during the exam window. Artificial intelligence is also not your own work, and is not allowed. Using Artificial intelligence or any other non-approved aid is considered a violation to Academic integrity and will be penalized.

If you have some legitimate reason that is out of your control and unforeseeable causing you to be unable to take the exam at the scheduled time, we will work out a way to accommodate you. Emergencies include, but are not limited to medical emergencies, illness, serious illness or death of a close family member, natural disaster, or other event that is _unforeseeable and out of your control_. I would rather you take an Exam late than take it when you are in the hospital, during a power outage, etc. Please let me know as soon as possible if something unexpected occurs that may prevent you from taking an exam.

Please do your best to set aside this time during the lecture period for your learning as much as possible. If you are dealing with something that makes you unable to physically be at a computer/tablet/ phone during the Exam/Discussion time, LET ME KNOW! When possible, I may require some documentation for your excuse. I need your HONESTY about this policy. Please don't abuse it.

I am giving 4 exams. I will drop your lowest exam score IF you TAKE all 4 exams, and get at least a 50% on each of them. If you do not get 50% on all 4 exams, I will just average the 4 exams towards your final grade.

Exams are online, but it is YOUR responsibility to be someplace with a stable internet. **Please download the Canvas App as a backup and log in before the exam**. If your internet goes out, you can resume where you left off very quickly!

Late work: In general, I do not accept late work but I do give you flexibility to miss a few assignments. If you have a medical issue or personal emergency that puts you completely out for more than a week, or is ongoing, talk to us about potentially extending due dates. Also contact us about using your ADA accommodation to extend a due date if applicable. Otherwise, I have the gradebook set to deduct 10%/hour, meaning that if you are more than 10 hours late you get no credit. I will not adjust due dates for forgetting, being busy, etc. Recognize you already have some flexibility*** with the dropped assignments and point caps.

If you enroll late, you will need to use your flexibility to account for these missed assignments and I will not accept late work for late adds.

*****Note:** Do NOT resubmit an assignment that you turned in on time late! This leads to the assignment being marked as late and you lose points. It is YOUR responsibility to NOT resubmit assignments late.

Accommodations For Students With Disabilities: Students requesting accommodations for this course due to a disability must provide a current Authorization for Accommodation (AFA) letter issued by the Office for Students with Disabilities (OSD) which is located in University Center 202 behind Center Hall. Students are required to present their AFA letters to Faculty (please make arrangements to contact me privately) and to the OSD Liaison in the department in advance so that accommodations may be arranged. Contact the OSD for further information:

858.534.4382 (phone) osd@ucsd.edu (email) http://disabilities.ucsd.edu (website) Do this within the first week of class. You can choose to use your accommodation or not, but you need to decide this up front so that I can accommodate your needs.

Academic integrity: Students are expected to do their own work. Cheating will not be tolerated and all suspected cases will be handed over to the Academic Integrity Coordinator. Any student caught cheating may fail the course. Even the most minor infringements on Academic integrity will result in at least a full letter grade reduction. Submitting any material written by someone else (copied from a lab member, or from any on-line source, or written by AI) is a violation of academic integrity. For information on academic integrity at UCSD: https://students.ucsd.edu/academics/academic-integrity/index.html

Student Questions/Enrollment: Please direct student questions to Biological Sciences Student and Instructional Services. UCSD continuing students use the Virtual Advising Center vac.ucsd.edu Summer Session (non UCSD students) may email biousis@ucsd.edu

More detailed explanations of Flexibility, Modality, iclickers, etc.

Flexibility Explained:
We understand that you may be ill, may have family responsibilities, have transportation issues, or be working to support yourself. You do need to work with your employer to be present in class as much as possible, but we do have some flexibility built in for you. This flexibility is cumulative, so save as much of it as you can for when you need it.

 -You only need 65% of clicker/participation points to get full credit
 -You can miss 4/23 lecture checks
 -You can miss 3 DI sections (and fill in more missed points with DI boards)

Examples of using your flexibility:
-You get sick/get a red thumbs down and cannot come to campus
-You need to care for family members
-You come to class most of quarter and decide to not come back after Thanksgiving break
-You have a job on Tuesdays that you need to support yourself
-You have to leave 30 mins early on Thursdays to get to soccer practice
-You need a mental health day
-You have car trouble/the bus is late
-You could not find parking in time
-You leave class a little early to go to the dentist
-You can't find parking and are running late
-You need to leave class early to catch the bus/ a ride
-You enroll late

You can choose when to use YOUR flexibility. It is for any time or occasion, but it is not infinite.

How do I get additional flexibility? Talk to me and…

-Have an OSD (Office for students with disabilities) accommodation
-You would need to have an acute issue that is *unforeseeable* <u>and</u> *out of your control* and affects you for 2 weeks or more due to the same issue
-If something happens very late in the quarter you may need to take an incomplete to use this flexibility
-Keep in mind the add/drop date

<u>**Contingency plans if Dr. B has to move class online:**</u>

<u>What if Dr. B is sick and cannot hold in person class?</u>

*If this is the case, class will be **asynchronous** and online. I will lower the iClicker Threshold for the class accordingly by 5%/missed lecture. For example, if Dr. B cancels 1 live lecture due to illness, the threshold will drop from 65% to 60%. If I miss 2 lectures it would be 55%. This is OF THE POINTS THAT OCCUR. Note there are less points, but then you need less as well.*

<u>Plan A:</u> I release a recording of the lecture and I hold optional Office Hours for Q&A online during the regular lecture time

<u>Plan B:</u> I release a recording of the lecture and an IA holds optional Office Hours for Q&A online during the regular lecture time.

<u>What if the Grad TA is sick and cannot hold in person Discussion?</u>

<u>Plan A:</u> *If this is the case, discussion will be **synchronous** and online.* You will all be in one large Zoom rooms with the Grad TA and the Undergrad IAs to help. You will do the activities with your groups in break out rooms.

<u>Plan B:</u> If the Grad IA is too sick to hold class online, Discussion will be canceled. If this happens more than once, or happens very late in the quarter, we will lower the discussion point cap and denominator. You will be notified of these changes if they happen. At the end of the quarter, I will adjust the point cap to make it the the same for all students in the class, one section won't have higher expectations than the other.

How exactly do Participation points work?

I do not know the EXACT number if clicker points there will be. But they will be spread out through the quarter/lectures. They are based on answering, not correct/incorrect. When we do Discussion activities in Lecture time, where will be some clicker questions.
If we do Discussion activities during section time, then there will be 5 points for participating and completing the assignment.

Example 1: Let's say there are 132 iClicker questions over the live lecture periods. Lets say, overall you earn 122 of them.
122/132 = 92% This is above 65%, so you get all 15 points towards your grade.

Example 2: Let's say you get 100 points out of the 132.
100/132= 75% This is above 65%, so you get all 15 points towards your grade.

Example 3: Let's say you only get 60 points out of the 132.
60/132= 45% you don't get all 15 points, BUT you get a scaled proportion of those:
45%/65% = 69% * 15 points = 10.38 towards your final grade

When is it appropriate to send an email versus ask a question in class?

Content related question: i.e. "Can you explain this concept more?", "What is the difference between X and Y?". Ask these **in office hours/Q&A session/ During class when I take questions.** Other students may have a similar question and will benefit from you asking the question and hearing the answer explained. You can also raise your hand during lecture for extra clarification. I cannot help you with these kinds of questions via email because they often require a detailed explanation.

General Logistics questions: i.e. "When is this activity due?" "What will the exam be like?". Many of these questions can be answered by reading the materials I post on Canvas, or **looking at the schedule**. Try to use those resources before asking me, but if you have further questions, or think that I made a mistake on the calendar, please **feel free to ask in class** when I take "general questions" at the beginning or end of class. These questions can be emails if you can't find the information, and have already looked thoroughly, but please keep in mind that you need to look at the calendar to know when things are due. However, if you should be able to access something on Canvas, but cannot, **please feel free to email me right away** so that I can make the material accessible to the class!

Personal Question: i.e. "I have fallen behind due to prolonged illness." "I have an accommodation on Exams" These are things to **email me** about since they don't concern the rest of the class. Don't raise your hand in class to ask questions like these because

they take up time that is not relevant to the majority of the class. Make sure that the email you send has the subject line **"BILD 3".** If I do not reply after 48 hours on a M-F, please feel free to remind me in class before or after, on your way in or out of the classroom, or forward me the email again. Please make sure to cc your IA on the SAME email if they are working. I may or may not be able to help you. Sometimes I can, or I can give you advice on whether dropping is a good option given the time and circumstance.

Resources for student support

The University of California has a lot of resources for students experiencing non-academic problems. It is your responsibility to utilize the resources provided to you, but if you have trouble accessing these resources, please reach out to me.

Technology: If you don't have a way to access the internet or interact with Canvas, Fill out this form: https://eforms.ucsd.edu/view.php?id=490887

Teaching + Learning Commons The Teaching + Learning Commons offers tutoring, consultations, and workshops on learning strategies as well as assistance with writing in the Writing + Critical Expression Hub http://commons.ucsd.edu

SPACES: Book lending service for students https://booklending.ucsd.edu/

Community Centers: The Campus Community Centers at UC San Diego build community among our diverse population of students, faculty and staff members. Each provides a forum to increase awareness of social issues, encourage dialogue, build community, improve retention, increase outreach and yield, and foster academic success. For a list of the many campus community centers, as well as other resources to support students, go to: https://diversity.ucsd.edu/

Counseling and Psychological Services (CAPS) provides free, confidential, psychological counseling and crisis services for registered UCSD students. CAPS also provides a variety of groups, workshops, and drop-in forums. For more information, please visit our Counseling Services page. https://caps.ucsd.edu/

CARE at the Sexual Assault Resource Center is the UC San Diego confidential advocacy and education office for sexual violence and gender-based violence (dating violence, domestic violence, stalking). CARE provides free and confidential services for students, staff and faculty impacted by sexual assault, relationship violence and stalking. https://students.ucsd.edu/sponsor/sarc/

Undocumented Student Services Center is committed to serving our undocumented students and their families through holistic services. We also advocate for generating a sense of community for all students that are undocumented or come from mixed immigration-status families. https://students.ucsd.edu/sponsor/undoc/

Student Veterans Resource Center (SVRC) is committed to ensuring that military affiliated students successfully make the transition from the military environment to campus life, and are assisted in their progress toward completing their academic degree. In collaboration with other University partners, the SVRC seeks to identify and mitigate the barriers to academic success that are specific to the military affiliated student community. https://students.ucsd.edu/sponsor/veterans/index.html

The Hub (https://basicneeds.ucsd.edu/triton-food-pantry/index.html) will point you to resources to meet your basic needs (nutritious food, stable housing, etc). Some of these resources are listed below. I do not know if these resources are available during the campus closure, the website has not been updated.

Triton Food Pantry: The University of California believes that all students should have access to nutritious food. https://basicneeds.ucsd.edu/triton-food-pantry/index.html I do not know if these resources are available during the campus closure, the website has not been updated.

English language Learners: here are resources to help English Language Learners: https://commons.ucsd.edu/educators/ELP-ii/resources.html#English-Language-and-Communicat

Safe Escort program: Call (858) 534-9255, or extension 4-WALK from a campus phone, year-round between sunset and sunrise, to request that a student Community Service Official escort you to your campus destination.