

BILD 3: Organismic and Evolutionary Biology

A00: MWF 10:00-10:50 AM, York Hall 2622

B00: MWF 1:00-1:50 PM, Warren Lecture Hall 2001

PROFESSOR CONTACT INFORMATION

Dr. Sarah Stockwell (sarahs@ucsd.edu)

Office:

Beginning of the quarter: Humanities and Social Sciences (HSS), Room 1310

Later in the quarter: Muir Biology 1112

I will post an announcement on Canvas when I move to Muir Biology.

Office hours: Mondays 2:30-3:30 PM.

Note: in week 1, my office hours will be on Tuesday Oct. 1 from 10:30-11:30 AM instead.

HEAD INSTRUCTIONAL ASSISTANT CONTACT INFORMATION

A00: Bahram Kheradmand <bkheradm@ucsd.edu>

B00: Weeks 1-4: Iris Wang <ziw125@ucsd.edu>. Weeks 5-10: Jess Gambel <jgambel@ucsd.edu>

NOTE: Please contact me only in case of an emergency. The best way to contact me is via email. **Please email your instructional assistant (IA) or one of the head IAs (see above) for all other inquiries.** In all emails, **please put “BILD 3” in the subject line** to indicate your email is about this course. Because there are so many students in this course, we cannot answer individual questions about course content and these emails will be deleted. Attend lectures, discussion sections, IA and professor office hours, and talk to your fellow students to get answers to individual questions. Or ask during lecture!

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 can also use coursefinder.ucsd.edu, which will take you to all your courses whether they're on Canvas or TritonEd.

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

UCSD is transitioning from TritonEd to Canvas. Our BILD 3 course will be managed using Canvas, while some of your other courses may appear in TritonEd. The Course Finder page (coursefinder.ucsd.edu) will display all of your TritonEd and Canvas courses.

If you have not used Canvas before, refer to the student help guides and videos, which are located on the left-side menu's help section (the question mark icon). Should you need any technical assistance with Canvas, please alert your instructor and 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. A representative will get back to you within 48 hours (Monday through Friday).

Reading assignments: By the end of each lecture day, I will post the reading assignment for the next lecture on the Canvas site for our class. You should complete this reading assignment by the start of the next class. There will be a clicker quiz on the reading at the beginning of each class.

Lecture slides: Research suggests that students learn best if they take independent notes, so I do not post lecture slides in advance. Lecture slides in PDF form will be available on Canvas within 48 hours after the lecture was given. I will number slides to help you refer to them in your notes. If you are registered for the course or on the wait list, you should have access to the course web site now.

Access:

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 automatically. Extension students can bring proof of enrollment to the ACMS Help Desk (Applied Physics and Math bldg. 1313, M-F, 8:00-4:30) to obtain Canvas access. More information for extension students can be found here: <https://extension.ucsd.edu/student-resources/>

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.

REQUIRED MATERIALS

- **Textbook:** Campbell Biology, 11th edition. 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 at the beginning of each class, so you need access to the book to succeed in the class. Used copies may be available online or at the bookstore, and the book is on reserve at Geisel Library. I have arranged with the publisher to make an excerpt of the textbook available that includes only the chapters we will use in this class, which is less expensive than the full textbook. This is available only at the UCSD bookstore; look for the jellyfish on the cover (if it's a picture of red blood cells, it's an excerpt from a different textbook and you shouldn't buy it). ISBN for the excerpt: 9781323677223
- The publisher of Campbell Biology offers various supplemental materials including a CD, a web site called Mastering Biology, and a book of exercises. These supplemental materials may be useful to you, but they are NOT required.
- **iClicker:** You will need to bring an iClicker to class. Older versions of the iclicker can be used as long as the remote ID can be read and the remote can be registered on Canvas. 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).

GRADING

100 Points: Midterm

200 Points: Final (cumulative)

20 Points: Clicker participation in lecture (see below)

20 Points: Clicker quizzes at the beginning of each class (see below)

27 Points: Discussion section participation/attitude (3 points per required discussion section)

35 Points: Homework/in-section work

There will be a small number of extra credit points available; details announced later.

CLICKERS

We will be using clickers in class. This is a response system that allows you to answer questions I pose in class. There will be two kinds of clicker questions:

1) Quiz questions: At the start of each class, there will be clicker questions that will be graded on correctness. One will be a question on the reading due for this lecture, and one will be an exam-style question on the material from the previous lecture or the previous week's required discussion section. Grades on these quizzes will be based on the proportion of each day's quiz questions that you answered correctly. These are closed-book quizzes, so you must answer without consulting the book, your notes, other students, etc.

2) Participation questions: There will be other clicker questions during lectures, which 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 only on participation (you get credit for clicking in, regardless of which answer you choose).

To receive credit, you need to register your iclicker remote 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 and clicker grades.

The following actions are considered cheating on clicker quizzes and will result in an automatic zero on ALL clicker points and a report to the Academic Integrity Office: Clicking in for a classmate who is not in lecture, looking at another student's clicker to copy their answer, or having someone else click in for you while you are not in lecture. If asked by the professor or an IA, you must reveal your clicker number and/or temporarily turn over your clicker so we can check it.

For the first full week of class, 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 Canvas so you can check. Starting the first lecture of the second full week, you will receive points for answering clicker questions in lecture. I will assume your clickers are working properly by this time. See the end of this document (*Clicker Instructions*) for details.

LECTURES

Check Canvas for the reading assignments to be completed by the beginning of each lecture. All material presented in lectures (and in the readings) is fair game for the exams. Do not expect to skip lectures and still do well in the course. Lecture slides will be posted on Canvas after each lecture, but they are, at best, outlines, and essential material will be presented in class that does not appear on them or in the textbook. Participating in in-class discussions is also important to your understanding of the material. Lectures will be posted as a **video podcast** within 24 hours after each class time and

can be accessed at podcast.ucsd.edu. Be aware that the podcast sometimes has technical glitches and is unavailable for particular class session(s).

DISCUSSION SECTIONS

IA-led discussion sections **are required** unless noted on the section schedule below. You must attend the discussion section you registered for. You will receive points for participating in discussion section. Sections will meet beginning in the first full week of classes. Sections will discuss assigned readings, discuss material from lecture, or do exercises. **All material from section readings is fair game for the exams.** See the IA list below for information regarding times and locations of discussion sections.

Homework assignments are due **in section, at the beginning of section**. If you know you won't be able to attend section that week for some reason, you can give the assignment to your IA ahead of time. **Late assignments will be marked down 25% for each day, or part of a day, that they are late.** Other accommodations will be made on homework only under extraordinary circumstances. Please understand that accepting late work in less extreme cases is unfair to other students.

EXAMS

There is one midterm worth 100 points and a final exam worth 200 points. Exams will cover material covered in lecture, readings assigned for lecture and section, and section exercises. Use the learning objectives as a guide to what lecture/reading material you need to know for the exams. The midterm will contain material for that section of the course up to the lecture preceding the exam. 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 exams will not be returned. Questions concerning exams will be addressed in Discussion Sections or 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 take the exam.**

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

GRADING

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 will 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. For those taking the class pass/no pass (P/NP), the minimum final grade to receive a grade of P is a C-. The final course curve is based on the students that are enrolled in the course at the end of the quarter. 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.

WAIT LIST

If you are on the wait list for this class you will be automatically added if space

becomes available. If you have any concerns, please contact the Biology Student Affairs Advising Services office at 858-534-0557 or go to their website (<http://biology.ucsd.edu/education/undergrad/advising/index.html>). Please do not ask IAs to add you to their section; they do not have any control over this process.

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

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)

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.
- 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>

ETIQUETTE FOR EMAILS AND IN THE CLASSROOM

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**. 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 ask in section/lecture or attend office hours.

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

Please do NOT post my lectures or class documents on public websites like Course Hero or others. I work hard on my lectures and do not appreciate the material being made public for anyone to see or download.

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

BILD 3 TIPS FOR SUCCESS

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

- 1) Do the reading assignments (posted on Canvas) before each class.
- 2) Go to lecture, participate in discussions, and take notes.
- 3) Pay attention to the learning objectives provided. I base exams on these.
- 4) Read “How to study for BILD 3,” posted in the “Learning Objectives and Exams” section of the Canvas site.
- 5) 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.
- 6) 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.
- 7) 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.
- 8) 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!

- 9) Reflect on how many of the Lecture Review quiz questions you get right, and how confident you are in your answers. These are the kinds of questions you should expect to see on exams.
- 10) Go to your discussion section to have questions answered, discuss topics in detail, and get extra help and guidance.
- 11) Ask for clarification during lecture. **I mean it, ask questions during lecture!**
- 12) Go to the professor and your IA's office hours and ask questions. It's not an imposition; we expect and want you to do it! The best students ask for help.

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.

Bring any questions to discussion section, contact IAs 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.

If you are having academic difficulty, OASIS (<http://oasis.ucsd.edu/>) can often 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 Counseling and Psychological Services (CAPS): (<https://wellness.ucsd.edu/CAPS/Pages/default.aspx>), which is free to students. They can help you get over many types of hurdles.

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

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

Participation questions:

If you answer clicker questions in at least 80% of the lectures during quarter, you will get full credit. If you answer questions in less than 80% of the lectures, your participation grade will be based on the proportion of lectures in which you answered questions. For example:

- Answered questions in 70% of lectures: Score = 70% (14 points out possible 20)
- Answered questions in 90% of lectures: Score = 100% (20 points)

Quiz questions:

If you answer questions on *at least* 80% of the quizzes during the quarter, your grade will be calculated as if the remaining quizzes didn't happen; your grade will be based only on the quizzes you

were present for. If you answer *less than* 80% of the quizzes, the missing questions will be counted as wrong answers. For example:

- Answered quiz questions in 92% of the lectures and got 87% of the answers correct. Overall quiz grade: 87%.
- Answered quiz questions in 75% of the lectures and got 87% of the answers correct. Overall quiz grade: $(.75)(.87) + (.25)(0) = 65\%$.

If this seems complicated, all you really need to know is: make sure you answer the clicker questions for at least 80% of the lectures!

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 to receive credit for responses during class. If you have not registered your clicker by October 25, then it will be too late and you will receive zero clicker points.

Register your clicker using the link on our Canvas site. On the left side of the screen, there is a list of modules. Click the “iClicker Registration” module and follow the instructions.

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.

You will not see your clicker points on Canvas until you have registered your clicker. To ensure your clicker is working properly, please register **RIGHT AWAY**. Every student in this course must have their own clicker to receive clicker points.

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 give full clicker credit if you answer 80% of the questions or more. **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 one of the head IAs (see page 1 of the syllabus for their addresses) with this information **before the next lecture**): a) your student ID number b) your clicker ID.

Clicker Troubleshooting

Sometimes clickers break, and some days there is a good reason for missing lecture. **That is why you receive full credit for only answering 80% of the questions.** 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, go through the troubleshooting guide below.

If you are not getting the points you deserve:

- 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 one of the IAs for assistance. They 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, nor can we 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 solve it or see one of the IAs right away so we can resolve the problem for future lectures.

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

Week 0 (Sept. 27):

Introduction to the class

Week 1 (Sept. 30-Oct. 4):

Introduction to evolutionary biology

Overview of natural selection

Week 2 (Oct. 7-11):

History of evolutionary thought

Evidence of evolution

Week 3 (Oct. 14-18):

Evidence of evolution

The genetics of populations

Week 4 (Oct. 21-25):

The genetics of populations (continued)

Natural selection

Phylogenetic trees

Week 5 (Oct. 28-Nov. 1):

Phylogenetic trees

Speciation

History of life on Earth

Friday, November 1, 6:30 - 7:50 PM (outside of class): Midterm exam

Week 6 (Nov. 4-8):

History of life on Earth (continued)

Human evolution

Week 7 (Nov. 11-15):

Human evolution

Biodiversity

(Note: no lecture on Monday, November 11. See next page for discussion section schedule.)

Week 8 (Nov. 18-22):

Biodiversity

Physical environment and biosphere

Week 9 (Nov. 25-29):

Population ecology

(Note: no lecture on November 29. See next page for discussion section schedule.)

Week 10 (Dec. 2-6)

Community ecology

Ecosystem ecology and climate change

December 7th, 3:00-6:00 PM: Comprehensive final exam

Important Dates: Wait lists end: Oct. 10. Last day to drop without a “Withdrawal” (W) on transcript: October 25. Last day to drop with a W: November 8. Notice: As of Fall 2018, the Registrar has moved the W deadline from week 9 to week 6 (Nov. 8).

DISCUSSION SECTION SCHEDULE

Readings and worksheets for discussion sections can be downloaded from the Canvas site.

Week	Activity
1 (starts 9/30)	Get to know your class and syllabus scavenger hunt
2 (starts 10/7)	Natural selection reading discussion
3 (starts 10/14)	Genetic drift exercise
4 (starts 10/21)	Population genetics exercise
5 (starts 10/28)	Phylogenetics exercise
6 (starts 11/4)	Macroevolution reading discussion
7 (starts 11/11)	Monday: no section.* Tues-Fri sections: Human evolution reading discussion. *
8 (starts 11/18)	Monday sections: Human evolution reading discussion.* Tues-Fri sections: Biodiversity Show and Tell*
9 (starts 11/25)	Monday sections: Biodiversity Show and Tell* Tues-Fri: no section.*
10 (starts 12/2)	Climate change activity

**Because of the Veterans' Day and Thanksgiving holidays, each student will have one week without a discussion section. If your discussion section meets on Mondays, you will not have section in week 7. If your discussion section meets on Tuesdays, Wednesdays, Thursdays, or Fridays, you will not have section in week 9.*

LIST OF IAS AND DISCUSSION SECTIONS

You must attend the discussion section you are registered for in order to receive credit.

If there is a particular week in which you have a special, valid reason for needing to attend an alternate discussion section, email your IA and the IA of the alternate discussion section to see if they are able to accommodate you. You must get permission from the alternate IA before attending their section.

IAs for A00 lecture class (10:00 AM):

IA	Email	Discussion section day and time	Discussion place	Office hour time and place
Bahram Kheradmand	bkheradm@ucsd.edu	Mon. 3-3:50 PM	HSS 2150	Mon. 2-3 PM, MOM (Muir Woods coffee house)
Bahram Kheradmand	bkheradm@ucsd.edu	Mon. 4-4:50 PM	HSS 2154	Mon. 2-3 PM, MOM (Muir Woods coffee house)
Yiyi Shen	yis225@ucsd.edu	Mon. 5-5:60 PM	HSS 2150	Wed. 2-3 PM, Blue Pepper
Jack Dzvonik	jdzvonik@ucsd.edu	Tu. 7-7:50 PM	CENTR 217B	Wed. 1-2 PM, Mandeville Coffee Cart
Samadhi (Sam) Thavarajah	sthavara@ucsd.edu	Wed. 4-4:50 PM	HSS 2150	Thurs. 12:30-1:30 PM, Roger's Coffee Shop in Revelle
Cindy Wang	xiw415@ucsd.edu	Fri. 3-3:50 PM	CENTR 218	Fri. 9- 10 AM, Tables outside Price Center Starbucks

Students enrolled in the 10 AM lectures (A00) may come to the office hours of any IA listed above.

IAs for B00 lecture class (1 PM):

IA	Email	Discussion section day and time	Discussion place	Office hour time and place
Sabrina La	sla@ucsd.edu	Mon. 4-4:50 PM	HSS 2150	Mon. 5-6 PM, Blue Pepper
Gayatri Mainkar	gmainkar@ucsd.edu	Mon. 6-6:50 PM	SOLIS 111	Wed. 9-10 AM, Mandeville coffee cart
Tai (Isabelle) Yu	tjy003@ucsd.edu	Tu. 5-5:50 PM	HSS 2154	Fri. 11-12 PM, Revelle Commuter Lounge
Catherine Mullenmeister	cmullenm@ucsd.edu	Tu. 6-6:50 PM	HSS 2154	Wed. 11-12 PM, Roots (Muir College)
Weeks 1-4: Ziyi (Iris) Wang Weeks 5-10: Jess Gambel	Iris: ziw125@ucsd.edu Jess: jgambel@ucsd.edu	Wed. 2-2:50 PM	HSS 2150	Iris: Wed. 12-1 PM, Women Center (2nd floor, above Blue Pepper). Jess: Wed. 10-11 AM, Muir Biology 1102
Felix Tsai	f3tsai@ucsd.edu	Wed. 7-7:50 PM	CENTR 207	Wed. 4:30-5:30 PM, Outside Roger's market in Revelle
Sydney Saekow	ssaekow@ucsd.edu	Th. 9-9:50 AM	CENTR 217B	Mon. 11-12 PM, Biomedical Library Room 223
Loryssa Tade	ltade@ucsd.edu	Th. 10-10:50 AM	CENTR 217B	Wed. 3-4 PM, Price Center Theatre
Zachary Papich	zpapich@ucsd.edu	Th. 6-6:50 PM	CENTR 217B	Fri. 4-5 PM, Outside tables of MOM (Muir Woods) coffee shop
Weeks 1-4: Ziyi (Iris) Wang Weeks 5-10: Jess Gambel	Iris: ziw125@ucsd.edu Jess: jgambel@ucsd.edu	Fri. 9-9:50 AM	CENTR 218	Iris: Wed. 12-1 PM, Women Center (2nd floor, above Blue Pepper). Jess: TBA
Sabrina Liao	s7liao@ucsd.edu	Fri. 4-4:50 PM	CENTR 218	Thurs. 2-3 PM, Audrey's (near Geisel 2E)
Yijun Fan	yjf001@ucsd.edu	Fri. 5-5:50 PM	CENTR 218	Thurs. 3PM-4PM, Fairbanks Coffee Cart in Revelle

Students enrolled in the 1 PM lectures (B00) may come to the office hours of any IA listed above.

Portions of this syllabus adapted from Carolyn Kurl.

Consent to Participate in Educational Research

University of California, San Diego

Consent to Act as a Research Subject

Investigating the Impact of Pedagogical Choices on University Student Learning and Engagement

Who is conducting the study, why you have been asked to participate, how you were selected, and what is the approximate number of participants in the study?

Gabriele Wienhausen, Director of the Teaching and Learning Commons, together with her education research colleagues is conducting a research study to find out more about how pedagogical choices affect student learning and experience in the classroom. You have been asked to participate in this study because you are a student in a class that is being studied or used as a control. There will be approximately 500,000 participants in this study.

Why is this study being done?

The purpose of this study is to create knowledge that has the potential to improve the learning and educational experience of students at UC San Diego and beyond.

What will happen to you in this study and which procedures are standard of care and which are experimental?

If you agree to be in this study, the following will happen:

- Your data from this class including grades, homework and exam submissions, and survey responses will be included in the analysis to determine the effectiveness of the pedagogical techniques used in this course compared to other similar courses.

How much time will each study procedure take, what is your total time commitment, and how long will the study last?

Your participation involves only agreeing to let us use your data in our analysis. It will require no time on your part above the time you put into this course without agreeing to the study.

What risks are associated with this study?

Participation in this study may involve some added risks or discomforts. These include the following:

1. A potential for the loss of confidentiality. We will not share your personally identifying data with people outside our research team. Data will only be kept in anonymized form for research purposes. Course data will not be used for this research study until after final grades have been posted and will be rendered confidential by removing any identifiers before analysis. Your instructor will not know whether or not you are participating in this study until after final grades have been posted. Data from students who opt out of the study will be removed prior to data analysis. Research records will be kept confidential to the extent allowed by law. Research records may be reviewed by the UCSD Institutional Review Board.

Since this is an investigational study, there may be some unknown risks that are currently unforeseeable. You will be informed of any significant new findings.

What are the alternatives to participating in this study?

The alternatives to participation in this study are not to participate. If you choose to opt-out of participating in this research study, we will exclude your data from analysis. Whether you participate will have no impact on your experience or grade in the associated class as the professor will not know who is or is not participating in the study until after final grades are assigned.

What benefits can be reasonably expected?

There is no direct benefit to you for participating in the study. The investigator, however, may learn more about how to improve student learning, and society may benefit from this knowledge.

Can you choose to not participate or withdraw from the study without penalty or loss of benefits?

Participation in research is entirely voluntary. You may refuse to participate or withdraw or refuse to answer specific questions in an interview or on a questionnaire at any time without penalty or loss of benefits to which you are entitled. If you decide that you no longer wish to continue in this study before the end of the quarter, simply respond to the online opt-out form here:

<https://goo.gl/forms/JSBRjEmkES6W6xYc2>. If you decide to opt out after the quarter has ended, you must contact Laurel Nelson (laureln@ucsd.edu) and give the quarter and the course from which you would like your data withdrawn.

You will be told if any important new information is found during the course of this study that may affect your wanting to continue.

Can you be withdrawn from the study without your consent?

The PI may remove you from the study without your consent if the PI feels it is in your best interest or the best interest of the study. You may also be withdrawn from the study if you do not follow the instructions given you by the study personnel.

Will you be compensated for participating in this study?

You will not be compensated for participating in this study.

Are there any costs associated with participating in this study?

There will be no cost to you for participating in this study.

Who can you call if you have questions?

Gabriele Wienhausen and/or her colleague has explained this study to you and answered your questions. If you have other questions or research-related problems, you may reach Gabriele Wienhausen at gwienhausen@ucsd.edu or (858) 534-3958.

You may call the Human Research Protections Program Office at 858-246-HRPP (858-246-4777) to inquire about your rights as a research subject or to report research-related problems.

Your Consent

If you consent to participate in this study and are at least 18 years old, no action is needed. If you DO NOT consent to participate in this study, or you choose to opt-out at any time during the

quarter, please submit this form online at <https://goo.gl/forms/JSBRjEmkES6W6xYc2>. Your instructor will not have access to the list of students who opted out until after grades are posted. Note that you must separately opt-out of the study for each course involved in this study.