

Spring 2021

BILD 1—The Cell

Instructor: Jessica Rusert (she/her)

E-mail: jrusert@ucsd.edu (Include BILD 1 in the subject line)

Scheduled Lecture Time: C00 MWF 10:00-10:50 am

D00 MWF 11:00-11:50 am

Office Hours: Wednesday 10-12pm (starting the second week of the quarter on April 7th)

I reserve the right to make changes to this syllabus as needed throughout the course. You will be notified of any changes. Be sure to allow Canvas notifications so you get announcements immediately as I will post announcements often throughout the course.

Course Learning Objectives:

By the end of this course, you should be able to:

1. Relate the structure of organelles/molecules to their cellular function.
2. Diagram how energy is produced and consumed in the cell.
3. Describe how biological information is stored, expressed, and regulated.
4. Explain how traits are inherited and how mutations arise.
5. **Increase your understanding of your own learning (metacognition)**, including recognizing what topics are easy or difficult for you to learn, learning what study strategies work best for you, and seeking help from instructors and colleagues at appropriate times.

Overall Philosophy

The teaching team and I know that many students find being online challenging, but **we will do our best to support you**. As the quarter progresses, the IAs and I will use your feedback to adjust the course. Please bear with us as we face this challenge together!

I believe that **learning about biology is inherently empowering**. Your biology coursework should not simply be a means to an end like a certain degree or profession. The knowledge you learn should also allow you to **understand situations that might arise in your life** and aid you in **helping the people in your family and community thrive**. In practice, what that means is that we will teach you the basic content knowledge about the physiology of people and other organisms, but then will we ask you to **go beyond memorization to deeply understand** the material and **apply knowledge to new examples**. For example, when we talk about cancer, we might use skin cancer as an example in a problem set but ask you to apply the concepts to liver cancer on an exam. That way, if someone in your life develops breast cancer, you will ideally already have had practice integrating the fundamental concepts you learned in BILD 1 with information about a particular cancer, which will hopefully allow you to better help them understand their disease and treatment.

I also believe that **everyone can learn biology and be a biology person** and that students are often the best resources in **helping each other grow**. Therefore, I have tried to build in places where you will engage with your fellow students **as a community of biologists**. Some of you might find such engagement difficult at first and some of this engagement is optional. However, it becomes easier with practice so I encourage you to make the most of these opportunities. Also, if you go on to have a career that involves biology in some way, for example as a researcher, healthcare professional, or drug developer, you will spend a great deal of your time communicating science. Through interacting with each other verbally and composing your ideas in writing, you can practice the communication and leadership skills you will need in such careers.

Lecture Structure:

Mondays will be the only synchronous lecture each week (10am and 11am). **Find the link in Zoom LTI Pro. Passcode is "Cell."** Lectures on Wednesdays and Fridays will be pre-recorded and ready for you to watch starting at 10am PST each day. Scheduled class time on Wednesdays and Fridays are a good opportunity for you to review with a study group, as they will likely also have this time set aside, or attend office hours. Wednesdays during class time, from 10am-12pm, will be my office hours where I'm open to speaking with students about anything related to the class, college, their career thoughts, etc.

Contacting Me and Discussion Boards:

Please ensure that all e-mails include BILD1 in the subject line and if the matter requires immediate attention include URGENT in the subject line as well. Emails directed to me should **focus on personal, tech, or course related issues** (e.g. deadlines listed in the syllabus versus that on the assignment are different, you cannot access the homework, etc.). I will respond to emails usually within 24 hours. I regularly check my e-mail during normal business hours (Weekdays ~8:30 am-4:30/5:00 pm), but on weekends you may not hear back from me until Monday morning.

Course content and **logistics** questions should be posted on the designated **Discussion boards** or sent to your IAs after carefully reviewing the syllabus for logistics information. This way others can see the responses on the Discussion boards and/or your IAs are aware of questions being asked. IAs can tailor discussion sections to address these questions and make me aware during our weekly meetings.

Optional Text:

Campbell Biology, 11th Edition by Urry, Cain, Wasserman, Minorsky and Reese (Pearson 2016) ISBN 9780134093413. On the class schedule there are parts of chapters from the text indicated that

match with the lecture topics. These readings are not required but can be a good resource if you are confused about certain terms/concepts. There are also great free resources online to supplement your learning. You are only required to know what we cover in this class so choose topics based on lecture material. Two solid free resources are below, but many others exist.

www.khanacademy.org

Open Learning Initiative: Introduction to Biology

<https://oli.cmu.edu/jcourse/lms/students/syllabus.do?section=df3e23850a0001dc518491159056b43c>

Canvas:

All course related information will be posted on our Canvas site. The lecture slides will be posted prior to the 10am lecture in weekly modules. Please check the Canvas site and your UCSD e-mail regularly for **announcements** as these will contain **timely, essential information**. You are responsible for staying up to date on of all course logistics and information provided during lecture and in announcements.

Instructional Assistants (IAs):

C00 Lecture	Email	Discussion Section	Office hours
Ramiz Ahmed	rkahmed@ucsd.edu	C01 Wed. 11am	Wed 12-12:50pm
Tianxu Chen	tchen@ucsd.edu	C01 Wed 2pm	Friday 1-2pm
Jackie Zhao	jiz065@ucsd.edu	C03 Thurs. 8am	Thurs. 7-7:50pm
Analine Aguayo	aaguayo@ucsd.edu	C04 Thurs. 9am; C06 Wed. 3pm	Friday 9-10am
Dhruv Parmar	dparmar@ucsd.edu	C05 Thurs 10am	Wed. 5-5:50pm

D00 Lecture	Email	Discussion Section	Office hours
Sydney Goss	sgoss@ucsd.edu	D01 Wed. 8am	Tues. 2-2:50pm
Sharon Lau	shlau@ucsd.edu	D02 Wed. 9am	Friday 5-5:50pm
Zoe Sidiropoulos	zsidirop@ucsd.edu	D03 Thurs. 2pm	Tues. 12:30-1:30pm
Nicole Ramos	niramos@ucsd.edu	D04 Thurs. 3pm	Wed. 4-4:50pm

Anastasia Pimentel	aepiment@ucsd.edu	D05, 06 Thurs. 4 & 5pm	Monday 12-1pm
--------------------	--	------------------------	---------------

Discussion Sections:

Sections begin the second week of the quarter, Monday, April 5th. **Find the links in Zoom LTI Pro for each section.** The content will vary from meeting to meeting, however, active engagement with the material in each section is critical to developing your understanding of the lecture material. A portion of your grade will be based on attendance and active participation in section. You are required to attend/participate in your designated discussion time to ensure equal student:IA ratio among the sections.

When you join the Zoom meeting room to participate in discussion sections your real name (as it appears on Canvas) must be set as your screenname so that you receive credit for attendance/participation. I also encourage you to turn on your camera to promote our active learning community. If this is uncomfortable for you, please upload a photo or avatar of yourself to your UCSD Zoom account and have it displayed when your video is off. Go here to change your preferred name (not your legal name) as it appears on unofficial UCSD documents and websites (like Canvas and Zoom): <https://students.ucsd.edu/sponsor/registrar/preferred-name.html>

If you experience extenuating circumstances that prohibit you from attending your enrolled section, **please let me know as soon as possible** so we can come up with an alternative. This may be in the form of having you attend a different section or the ability to submit an alternate activity that will count toward your discussion section points. I will evaluate these instances on a case-by-case basis.

Assignments:

There will be **six assignments** posted throughout the quarter that will allow you to work with the lecture material and prepare for the exams. These will be posted on Friday mornings by 10am and will be due Monday by 11:59pm. They will be graded 50% on completeness/effort and 50% for accuracy.

If you have questions on the homework you can ask the teaching team **clarifying questions**, but you **should not ask anyone to evaluate your answer for correctness**. You will get feedback when it is graded by looking at the rubric that is applied in Gradescope. You are encouraged to work with others but the words submitted for your assignment should be your own. Please see “How to Write in Your Own Voice.doc” in the “General Materials” module.

Assignments will be checked for plagiarism. Any assignment, exam, or other deliverable in this class that is identified for plagiarism will be given a **zero** and the student(s) will be reported to the office of academic integrity. Nothing should ever be quoted in your answers.

These assignments will be online assignments in Gradescope, just like your exams.

Assignment #1 – Topics 1	Posted April 2	Due April 5
Assignment #2 – Topics 2-3	Posted April 9	Due April 12
Assignment #3 – Topic 5-6	Posted April 23	Due April 24
Assignment #4 – Topics 9	Posted May 7	Due May 10
Assignment #5 – Topics 11	Posted May 14	Due May 17
Assignment #6 – Topics 13-14	Posted May 28	Due May 31

Exams:

The exams dates **during lecture time** are set and will not be changed so plan your semester accordingly. You will get to drop the lowest of the first three exams, but everyone must take the final exam. NO MAKE-UPS will be given even for extenuating circumstances for the first three exams (*unless you have a OSD exemption*). By allowing you to drop one exam I am building in a safety net for unforeseen circumstances, so plan to take all exams and drop the one you are unable to take. For extenuating circumstances that interfere with your ability to take the final (i.e. hospitalization), contact me to discuss your circumstances and come up with a plan.

Exam 1 - Monday, April 19 covers topics 1-3.

Exam 2 - Monday, May 3 covers topics 4-6.

Exam 3 - Monday, May 24 covers topics 7-11.

Final Exam – Friday June 11, 8am-10:59am cumulative.

All exams will be taken online **during your regularly scheduled lecture time**. The exam will be given through Gradescope and will be checked for plagiarism. While taking the exam you will be logged into Zoom with either myself or an IA so that any issues or questions about the exam can be readily answered. You should have your student ID with you and your camera must be on during the exam. If this is not possible please contact me to discuss your options.

Exams will be open book (Campbell only) and open note, **NOT open internet or with the help of others**, from class or online. However, **the exam is written to test your knowledge and your ability to apply that knowledge, not your ability to look up the information**. If you need to look up a lot of information throughout the exam, you will run out of time. If we were in person, you would not have your notes or textbook, so do not rely on these and study less for your exam.

For anyone living in a vastly different time zone that would cause you to take the exams in the middle of the night, **please be sure to indicate your need for a different exam time in the Week 1 course survey to ensure accommodation**. An email will go out to the students that are identified in the survey at least 1 week prior to the first exam to establish ONE alternate time for the first 3 exams and the final exam.

Regrades:

Any issues or concerns with grading on an assignment or an exam must be submitted through Gradescope within one week of grades being posted. The exact protocol will be explained in more detail once the first assignment is graded. I reserve the right to make changes to the regrades policy if I find that students are abusing/mis-using the option.

Lecture Participation Points:

Lectures will be both live (Mondays) and pre-recorded (Wednesdays and Fridays), but both will show up in the Media Gallery to watch at/after lecture. For each lecture there will be an associated quiz that must be completed for participation points. These quizzes will be available at lecture time MWF and must be completed by 11:59pm the next day. For example, Monday's lecture will be live and recorded. The **recording can take up to 2hrs to show up** before I can publish it, so will likely be available by 1pm. The lecture quiz for participation points on Monday's lecture will be due Tuesday by 11:59pm. Wednesday's lecture will be available at 10am and the quiz will be due Thursday by 11:59pm. Friday's lecture will be available at 10am and the quiz will be due by Saturday at 11:59pm.

Grading:

Grading in this course is not curved, so in theory every person could earn an A! You are not competing with each other for grades, so work together! The activities, requirements, and assignments from which you will earn your grade are designed to **promote your learning and the behaviors that tend to lead to learning.**

Do not email me to ask for ways to increase your grade or meet a cut-off at the end of the quarter. There will not be opportunities to receive extra credit beyond what is assigned/offered in the course as this would not be fair to your fellow students. Do the work, read through "**How to Study for This Course,**" "**Learn How to Study Using Retrieval Practice,**" "**Creating Study Guides,**" and give the **Supplemental Study Group a try.** Set aside **study time** and commit to **finding effective** and **efficient study methods** that work for you to learn the material. Please talk with me if you have concerns as soon as possible.

Lecture Participation	7%	Drop the lowest 3 scores
Discussion Section	7%	Drop the lowest score of 9
Assignments	10%	Drop the lowest score of 6
Course Surveys	1%	
Exams 1-3	46%	Drop the lowest score of 3
<u>Final Exam</u>	<u>29%</u>	

Total 100%

Letter grades are assigned as follows:

99-100% A+
93-98.9% A
90-92.9% A-
88-89.9% B+
82-87.9% B
79-81.9% B-
71-78.9% C (no C+)
69-70.9% C-
60-68.9% D
< 60% F

Late Work Policy:

Post-Lecture participation quizzes will be accessible all quarter. They can be submitted within 24 hours of the due date for 50% of the possible points. After this you will earn not credit on them but you can use them to test your knowledge if you missed the deadline and the late deadline.

For all assignments (#1-6), those turned in within 24 hours of the due date will be accepted, but with a deduction of 20% of the possible points, which will be subtracted from the effort-based points. You will not be able to submit >24 hours after the due date. No additional extensions will be offered as I must be fair and equitable to all students in the course.

Course Surveys:

There will be a handful of surveys throughout the quarter that help me gather helpful information about you and feedback on the course. These are worth 1% of your grade. The course surveys are designed to help me understand what is going well for you and what is not working. I am very open to constructive feedback as I want to foster a positive learning environment and ensure the course is effective in helping you learn, especially given this pandemic-induced, remote learning environment. Understand however, that sometimes the most successful, evidence-based teaching strategies are not necessarily those that all students enjoy. Learning new material is seldom easy and difficult tasks are not always enjoyable, though I will do what I can to make adjustments.

Supplemental Instruction/Study Group

This is support program to help students engage in active problem solving and discussion about course material. This is an optional but extremely useful resource for students in the course, run through the academic achievement hub. See the "Supplemental Study Group Information" module for more information.

Disability Access:

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:

Academic Integrity:

Students are expected to do their own work, as outlined in the UCSD Policy on Academic Integrity. Cheating will not be tolerated, and I will fail any student caught engaging in academic dishonesty. **Any student caught cheating on an exam will receive a failing grade for the course. They may also be suspended from UCSD.** Just because the class and exams are online does not change any policies regarding plagiarism or use of online "tutoring" resources.

Title IX Compliance:

The University recognizes the inherent dignity of all individuals and promotes respect for all people. Sexual misconduct, physical and/or psychological abuse will NOT be tolerated. If you have been the victim of sexual misconduct, physical and/or psychological abuse, we encourage you to report this matter promptly. As a member of this community, I am interested in promoting a safe and healthy environment, and should I learn of any sexual misconduct, physical and/or psychological abuse, I must report the matter to the Title IX Coordinator. If you want to speak confidentially you may contact the Counseling Center.

The Office for the Prevention of Harassment & Discrimination (OPHD) provides assistance to students, faculty, and staff regarding reports of bias, harassment, and discrimination. OPHD is the UC San Diego Title IX office. Title IX of the Education Amendments of 1972 is the federal law that prohibits sex discrimination in educational institutions that are recipients of federal funds. Students have the right to an educational environment that is free from harassment and discrimination.

Students have options for reporting incidents of sexual violence and sexual harassment. Sexual violence includes sexual assault, dating violence, domestic violence, and stalking. Information about reporting options may be obtained at OPHD at (858) 534-8298,

ophd@ucsd.edu or <http://ophd.ucsd.edu>. Students may receive confidential assistance at CARE at the Sexual Assault Resource Center at (858) 534-5793, sarc@ucsd.edu or <http://care.ucsd.edu> or Counseling and Psychological Services (CAPS) at (858) 534-3755 or <http://caps.ucsd.edu>.

Students may feel more comfortable discussing their particular concern with a trusted employee. This may be a student affairs staff member, a department Chair, a faculty member or other University official. These individuals have an obligation to report incidents of sexual violence and sexual harassment to OPHD. This does not necessarily mean that a formal complaint will be filed. If you find yourself in an uncomfortable situation, ask for help.

CLASS STATEMENT OF VALUES

Below are the values I expect each student in this class, IAs, and myself to uphold throughout the quarter. Acting according to these values ensure we will foster a collaborative and supportive learning environment.

VALUES	Upholding this value means that STUDENTS will...	Upholding this value means that the INSTRUCTIONAL TEAM will...
Courage – “the mastery of fear, to do what is right”	<ul style="list-style-type: none"> - Take action when we see something that undermines the values below - Make honest ethical choices even when at personal cost 	<ul style="list-style-type: none"> - Take action when we see something that undermines the below values - make honest ethical choices even when at personal cost
Fairness “Justice cannot be for one side alone, but must be for both.” ~Eleanor Roosevelt”	<ul style="list-style-type: none"> - Contribute fully and equally to collaborative work, so that we are not freeloading off of others on our teams - Not seek unfair advantage over fellow students in the course 	<ul style="list-style-type: none"> - Create fair assignments and exams and grade them in a fair and timely manner - Treat all students and collaborative teams equally

<p>Honesty “Honesty is the first chapter in the book of wisdom. ~Thomas Jefferson”</p> <p>“When honesty is established as a value it allows for and encourages the development of trust”</p>	<ul style="list-style-type: none"> - Advance the quest for truth and knowledge through intellectual and personal honesty in learning, teaching, research, and service. - Communicate openly without using deception, including citing appropriate sources 	<ul style="list-style-type: none"> - Give you honest feedback on your demonstration of knowledge and abilities on assignments and exams - Communicate openly and honestly about the expectations and standards of the course through the syllabus and in relation to assignments and exams
<p>Respect “Without feelings of respect, what is there to distinguish men from beasts? ~Confucius”</p>	<ul style="list-style-type: none"> - Speak openly with one another while respecting diverse viewpoints and perspectives - Provide sufficient space for others to voice their ideas 	<ul style="list-style-type: none"> - Respect students’ perspectives even while we challenge you to think more deeply and critically - Help facilitate respectful exchange of ideas
<p>Responsibility “Every member of an academic community – each student, faculty member, and administrator – is responsible for safeguarding the integrity of its scholarship, teaching and research.”</p>	<ul style="list-style-type: none"> - Complete assignments on time and in full preparation for class - Show up to class on time and be mentally and physically present - Participate fully and contribute to team learning and activities 	<ul style="list-style-type: none"> - Give you timely feedback on your assignments and exams - Show up to class on time and be mentally and physically present - Create relevant assessments and class activities
<p>Trustworthiness “Trust enables us to collaborate, to share information, and to circulate new ideas freely, without fear that our work will be</p>	<ul style="list-style-type: none"> - Not engage in personal affairs while on class time - Be open and transparent about what we are doing in class 	<ul style="list-style-type: none"> - Be available to all students when we say we will be - Follow through on our promises

stolen, our careers stunted, or our reputations diminished.”	- Not distribute course materials to others in an unauthorized fashion	- Not modify the expectations or standards without communicating with everyone in the course
--	--	--