

BILD1 Spring 2021

The Cell

BILD1 is an introductory course on the molecular and cellular biology of microbes, plants and animals. The course focuses on structures and mechanisms of action required for the smallest unit of life – the cell.

Instructor: Dr. Monica Chu

Contact: **Come to my zoom office hours!**

This is the place to go if you have questions regarding the course material or assignments. If you have matters that you would feel more comfortable discussing one-on-one during office hours, feel free to come to my office hours and let me know (one-on-one conversations can be conducted with zoom breakout rooms during my office hours).

**Dr. Chu's Office hours: Starting Thurs, 4/1/21
Tuesdays and Thursdays
4-5 PM**

Email: If you need OSD accommodations, if you are in a different time zone and cannot attend any of the office hours or if you have an extenuating circumstance, you can reach me by email at mwchu@ucsd.edu.

- **If you are about to send me an email, please think about whether your email fulfills one of the above mentioned requirements.**
- If contacting me by email, **Include "[BILD1]" in the subject header to ensure your email reaches my inbox.**
- 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). They can be reached at osd@ucsd.edu. Website: <http://disabilities.ucsd.edu>
- *An example of a different time zone would be if you were in Europe or China. I will be happy to schedule an alternative office hours to meet with you to answer any questions.*
- *An example of an emergency would be if you there is an extenuating circumstance (such as a medical or family emergency) that is out of your control and may conflict with the scheduled course.*

Course Website:

All materials for the class will be uploaded on Canvas (<https://canvas.ucsd.edu/>).

The lecture slides, important announcements, practice problems, online quizzes, and exams will be posted here, so please make sure to check the website everyday for important information.

Required Materials:

Computer and Internet Access: You will need to have internet access as well as access to a computer in order to view the lectures and to complete assignments and exams. If you are having difficulty accessing a computer, please email the Office of Student Affairs at: vcsa@ucsd.edu.

Recommended Materials:

Campbell Biology, 11th Edition is the recommended textbook. The lecture notes loosely follow the textbook and I will cite the textbook chapters so that you can refer to them for each lecture; however, you will not be tested on all the material present in the textbook chapters. The best way to focus your studying for each exam is to refer the Study Guides posted on Canvas for each exam, and to refer to the textbook for further clarification of the material.

Instructional Assistants:

A full list of your assigned IAs will be updated on Tuesday, March 30th at 9 AM.

Zoom meeting information for each section will be announced Friday morning (April 2nd) on Canvas.

Discussion Section	Mandatory Section Time	IA	Email Address
A01	W 10 AM	Dasuni	ddharmar@ucsd.edu
A02	W 12 PM	Krystal	kbosmans@ucsd.edu
A03	W 6 PM	Krystal	kbosmans@ucsd.edu
A04	Th 9 AM	Shashank	scoorapa@ucsd.edu
A05	Th 2 PM	Sam	mys003@ucsd.edu
A06	Th 1 PM	Ann	ashaltan@ucsd.edu

Course Components:

Lecture: Aysnchronous. The lectures will be uploaded by 9 AM (starting on Tuesday, March 30th) on the day of each scheduled lecture. The lectures will be delivered asynchronously, meaning they are pre-recorded and will be available for you to listen on your own schedule. ***For every lecture, there will be a short lecture quiz due at midnight on the following Monday (see "Lecture quizzes"). (For example, Lecture 1 and 2 quizzes will both be due by Monday, April 5th at midnight.)***

Mandatory Discussion Section (49 pts total):

Sections will start the week of April 5th

Attendance to your registered discussion section is required. During discussion sections, you will review the class material and participate in group activities that will be useful for understanding concepts and that will likely be covered on the exams. You will receive points for each section, for a total of 49 possible points which counts for 9% of your total grade.

In order to get discussion section credit for the week:

- You are required to attend your assigned discussion section, and work with your peers on a group activity.
- You must submit the activity by the end of the discussion section, which will be graded for feedback.
- You are allowed to miss up to 2 discussion sections. *(Each section you attend is worth 7 points, so you can attend 7 weeks of discussion section to get the full a total of 49 pts)*

There are opportunities to make up missed Discussion Section points:

Optional Problem Sets will be given weekly (3 points each- these count towards your discussion session credit, so 3 problem sets can contribute to completely make up each missed discussion section):

- **Problem sets** are posted on **Thursdays** and due **Sunday at midnight**.
- It is highly encouraged that you attempt Problem Sets prior to attending your discussion section, as this material will emphasize the concepts we are learning and are great preparation for the exams.

Lecture Quizzes (30 pts total): Required.

For each Lecture, a quiz to review the material will be **posted that will be due the following Monday at 11:59 PM**. Each quiz will be a combination of multiple choice/free response, and you will be given a total of 3 quiz attempts, and the highest of the 3 attempts will be used. **Note that you have to be careful not to click outside of the quiz window to avoid submitting your quiz attempt prematurely. Lecture quizzes are open-book, but should be completed on your own.*

No credit will be given for online lecture quizzes that are submitted past the deadline. **The lowest 3 quiz scores will be dropped**, and the quiz scores will count towards a maximum of 6% of your total grade.

Writing Assignments (21 pts total): Required.

Occasional short writing assignments (5 assignments; 1 paragraph-long assignments) will be given throughout the course to help review particularly challenging topics that may appear on the exam. These will be assignments that are completed individually.

Exams (100 pts each):

There will be 4 exams

Exam 1	Tu	Apr 13 th	3:30 - 4:30 PM
Exam 2	Tu	May 4 th	3:30 - 4:30 PM
Exam 3	Tu	May 25 th	3:30 - 4:30 PM
Exam 4	Mon	Jun 7 th	3:30 -4:30 PM

- The exams will be taken LIVE at the assigned dates/times
- closed book (no notes, textbooks) and must be completed without any outside assistance.
- With remote learning, it is important to maintain academic integrity- we will be using the Respondus Live Proctoring App to take Exams (More information below):
 - <https://web.respondus.com/instructor-proctoring/>
 - Free response questions will be screened by Turnitin to detect any violations of academic integrity.

Make sure that you are able to take the exams at the time and dates listed above. No makeups will be given for unexcused absences. The only exception for this is if you have a **documented medical excuse** or **extenuating circumstance** (contact Dr. Chu directly *by email* at mwchu@ucsd.edu in these cases). Include “[BILD1 – URGENT]” in the subject header if you are contacting me about serious/extenuating circumstance

Grading Overview:

		<u>Maximum Point Contribution **</u>
Discussion Section participation:	~10%	49 points
Lecture quizzes:	~6%	30 points
Writing Assign.	~4 %	21 points
Exam 1	20%	100 points
Exam 2	20%	100 points
Exam 3	20%	100 points
Exam 4	20%	100 points
Total (Final Grade)		500 points

**Exam 4 (non-cumulative) will be conducted during finals week, at the scheduled Finals time*

***Note that the amount of points allocated for each section cannot exceed the Maximum Point Contribution for each section:*

- *Example 1: if you score an 110% for Exam 1, you will have a total of 100 points maximum for Exam1 contributing towards your final grade.*
- *Example 2: If you accumulate 52 points for section credit, 42 Discussion Section points of 42 points maximum will contribute to your final grade.*

%		%		%		%	
A+	97-100	B+	87-89.99	C+	77-79.99	D	60-69.99
A	93-96.99	B	83-86.99	C	73-76.99	F	<60
A-	90-92.99	B-	80-82.99	C-	70-72.99		

Academic Integrity:

We hold you, as students in UCSD community, to the highest standards of academic integrity.

Whether you are taking an online reading quiz or an in-class exam, we expect you to demonstrate trust in your own intellect and respect for yourself and your fellow students. This means that you will pledge not to engage in academically dishonest activities, such as plagiarizing, cheating, or copying work or engaging with others to complete work that you should be completing on your own. We also expect that you do not facilitate other students in engaging in academically dishonest activities. **Note that all open response answers on reading quizzes, problem sets, and exams will be checked for plagiarism using Turn-it-in.**

All course materials are copyrights and are the property of the instructor, the course, and the University of California, San Diego and may not be posted online, submitted to private or public repositories, or distributed to unauthorized people outside of the course. Any suspected instances of a breach of academic integrity will be reported to the Academic Integrity Office for review. Websites (ex. Coursehero) are regularly checked for content uploads and any student found uploading copyrighted content to these websites will be reported.

BILD1 Supplemental Instruction (SI) is available for students.

This is a service provided by the Academic Achievement Hub at the UCSD Teaching + Learning Commons. The SI leaders will have access to the BILD1 course material (I do not directly work with the SI leaders).

Leader: Marehan Waly (mmwaly@ucsd.edu)

Date: Every Friday, 1:00pm-2:20pm

Location: (Zoom) <https://ucsd.zoom.us/j/96967305083>

Content Tutoring, 30-minute sessions with 2 students;

- Hours 12pm - 9pm from Monday to Friday and 5pm-9pm on Sunday
 - schedule may vary due to Tutor content/course specialty
- Workshops - Discipline specific, cover foundational/readiness topics
 - Topics and schedule on the AAH Website

Learning Strategists, remote 1-hour appointments

- Schedule link located on the [website](#)
- Learning Strategists support time management and how to learn skills and strategies across all disciplines

Note: For detailed schedules and program descriptions, visit aah.ucsd.edu

Tutoring is available at OASIS (Office of Academic Support and Instructional Services)

From the OASIS website (<https://students.ucsd.edu/sponsor/oasis/>): We are the learning center at UC San Diego and provide most of the free tutoring on campus in a collaborative, supportive environment. All UC San Diego students are eligible to receive OASIS services. Each year, OASIS serves 3,000 students in language, math, science, study skills, and writing as well as peer counseling and peer mentoring. They are located on the third floor of Center Hall, (858) 534-3760 (phone), oasis@ucsd.edu

Student Support Offices and Programs:

We care about you at UC San Diego, and there is always help available.

There are many resources at UCSD which support and celebrate our diverse community on the UCSD campus. There are also resources that may be especially helpful to you during these difficult times, and I highly encourage you to check them out:

Diversity Community Resource Centers:(diversity.ucsd.edu/centers-resources/community-centers)

Counseling and Psychological Services (858.534.3755 | caps.ucsd.edu)

Student Health Services (858-534-3300 | studenthealth.ucsd.edu)

CARE at the Sexual Assault Resource Center (858-534-5793 | care.ucsd.edu)

Undocumented Student Services Center (858-822-6916 | students.ucsd.edu/sponsor/undoc)

Student Veterans Resource Center (SVRC) (858-534-5080 | students.ucsd.edu/sponsor/veterans)

The Hub Basic Needs Center (858-246-2632 | basicneeds.ucsd.edu)

Triton Food Pantry (858-534-5694 | basicneeds.ucsd.edu/food-security/pantry)

Tentative Schedule:

Below is the tentative schedule of the order of topics that will be covered in this course. Refer to each topic's corresponding textbook chapter reading for further clarification and review of the concepts that will be covered during the lectures.

** Keep in mind that only the material covered in lectures will appear on the exams. There may be material in the corresponding textbook chapter which was not covered in lecture.*

<u>Topic</u>	<u>Chapter in Campbell Biology, 11th Edition</u>
Introduction	
Molecules/Bonds/Chemistry of Life Carbon & Life) Macromolecules	(Ch 2, 3, 4: Chemistry of Life; Water & Life; (Ch 5: Large Biomolecules)
Cell structure and organization	(Ch 6: A Tour of the Cell)
The Membrane	(Ch 7: Membrane Structure and function)
Energy and Enzymes	(Ch 8: An Introduction to Metabolism)
Cellular Respiration	(Ch 9: Cellular Respiration and Fermentation)
Photosynthesis	(Ch 10: Photosynthesis)
Cell Signaling	(Ch 11: Cell Communication)
Cell Cycle and Mitosis	(Ch 12: The Cell Cycle)
Molecular Basis of Inheritance	(Ch 16: The Molecular Basis of
Inheritance) Molecular Biology of the Gene	(Ch 17: Gene Expression)
Gene Regulation;	(Ch 18: Regulation of Gene Expression)
Meiosis	(Ch 13: Meiosis and Sexual Life Cycles)
Patterns of Inheritance	(Ch 14: Mendel and the Gene
Idea) Chromosomal Basis of Inheritance	(Ch 15: Chromosomal Basis of
Inheritance) Viruses	(Ch 19: Viruses)
Biotechnology	(Ch 20: DNA Tools and Biotechnology)