

# BILD 2: MULTICELLULAR LIFE

## Syllabus | Summer Session I | UC San Diego

*BILD 2. Multicellular Life (4 quarter units) is an introduction to the development and physiological processes of plants and animals. Included are treatments of reproduction, nutrition, respiration, transport systems, regulation of the internal environment, the nervous system, and behavior. Prerequisites: BILD 1.*

### Welcome to BILD 2, S1 2022!

My goal for this summer session is to help you become familiar with the functions of multicellular organisms. We will cover current knowledge in animal physiology at the molecular, cellular and systems levels, with particular emphasis on the human body in health and disease. I highly encourage you to take advantage of the resources provided, actively apply what you learn and continue to expand your knowledge of biology in the future.

### Learning Outcomes for this course include, but are not limited to:

1. Understanding the fundamental regulatory processes of multicellular organism physiology
2. Predicting how the perturbation of a molecule, cell, tissue, organ or organ system will affect its function, potentially leading to disease and impacting the function of the organism as a whole
3. Communicating scientific information through assignments and discussions that will encourage you to think like a biologist

**Instructor:** Dr. Cynthia Lebeaupin

*Pronouns: she/her/hers*

**Email:** [clebeaupin@ucsd.edu](mailto:clebeaupin@ucsd.edu)

*Please include "BILD2" in subject line.*

**OH:** Fridays on Zoom from 12:00-1:00pm

### Discussion Sections and IAs:

<b>A01:</b> Tu/Th 12-12:50pm:	Cynthia He ( <i>she/her/hers</i> )	<a href="mailto:czhe@ucsd.edu">czhe@ucsd.edu</a>
<b>A02:</b> Tu/Th 1-1:50pm:	Anushka Sinha ( <i>she/her/hers</i> )	<a href="mailto:ansinha@ucsd.edu">ansinha@ucsd.edu</a>
<b>A03:</b> Tu/Th 2-2:50pm:	James Garza ( <i>he/him/his</i> )	<a href="mailto:jrgarza@ucsd.edu">jrgarza@ucsd.edu</a>
<b>A04:</b> Tu/Th 3-3:50pm:	ChiHin (Davey) Feng ( <i>he/him/his</i> )	<a href="mailto:cfeng@ucsd.edu">cfeng@ucsd.edu</a>
<b>A05:</b> Tu/Th 4-4:50pm:	Siddharth Gaywala ( <i>he/him/his</i> )	<a href="mailto:sgaywala@ucsd.edu">sgaywala@ucsd.edu</a>
<b>A06:</b> Tu/Th 5-5:50pm &		
<b>A07:</b> Tu/Th 6-6:50pm:	Krystal Bosmans ( <i>she/her/hers</i> )	<a href="mailto:kbosmans@ucsd.edu">kbosmans@ucsd.edu</a>

### Course Format

BILD 2, S1 2022 is offered as remote instruction. This class will take place in a hybrid format, which means that you will engage with some elements in real-time (synchronous), and other elements at your own pace (asynchronous), within due dates. We will do our best to engage all of you as a community of biologists. It is essential that you attend real-time Lectures, Discussion Sections and Office Hours to stay connected with the material and earn participation points!

## What a typical week in this course will look like:

Day	To Do
Monday	Attend <b>lecture from 5-7:50pm</b> , create your lecture-related Study Guide
Tuesday	Turn in the <u>Problem Set</u> by 11:59am (noon), attend <b>Discussion Section</b>
Wednesday	Attend <b>lecture from 5-7:50pm</b> , create your lecture-related Study Guide
Thursday	Turn in the <u>Problem Set</u> by 11:59am (noon), attend <b>Discussion Section</b>
Friday	Upload all lecture <u>Study Guides</u> by 11:59am (noon) Complete the <u>Weekly Quiz</u> between 11:59am and 8pm
Weekend	Explore upcoming assignments, prepare questions for Office Hours/Section and study!

**NOTE:** Course components, grading and scheduling are *subject to change*. You will be notified of any changes as soon as possible. These notifications will be announced via the course website.

## Course Components

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### Materials:

Required: internet access for Canvas and Zoom (<https://ucsd.zoom.us/>)

Optional (but recommended): Campbell Biology, 10th, 11th, or 12th editions

### Course Website:

Accessible via Canvas: <https://canvas.ucsd.edu>. Announcements and course resources including lectures, problem sets, quizzes and other relevant information will be posted here. A discussion board will allow you to introduce yourself and ask questions about the material and technology to your fellow students, the IAs and myself. Assignments will be submitted online. Exams will be conducted online, through Canvas and Gradescope. Please access Canvas frequently for guidelines.

### Lectures:

Lectures will be held synchronously via Zoom on **Mondays and Wednesdays from 5:00pm-7:50pm**. It is highly recommended that you attend lectures to promote your active participation and ask questions live. Join lectures via the Zoom tab in Canvas under "Upcoming Meetings". Recorded lectures will be available. As lecture participation credit, you must submit a 1-page **Study Guide** associated with each lecture and its learning outcomes prior to the **Weekly Quiz** (see below).

A **Pre-course Survey**, graded for completion, will help the BILD 2 team know a little more about you.

A **Final Reflection**, graded for completion, will allow you to provide feedback and reflect on your experiences in this course.

### Office Hours:

Accessible via the Zoom tab in Canvas and posted under "Upcoming Meetings". I will hold office hours **Fridays from 12:00pm to 1:00pm** where you can just drop in! IA office hours will be shared on Canvas. You may attend any of the office hours, regardless of your discussion section enrollment. Additional office hours will be communicated through Canvas or scheduled by appointment.

### Discussion Sections:

Accessible via the Zoom tab in Canvas and posted under "Upcoming Meetings". Biweekly discussion sections are designed to support your learning, structure your studying and practice your skills with **Problem Sets**. These problem sets will be graded for completion and **due by 11:59am (noon)** on the day of the discussion section. Attendance in discussion section is required, counting as 5% of your final grade. You are encouraged to attend and participate in your enrolled discussion time for equal student:IA ratio among sections. I understand that, on occasion, you may not be able to attend your discussion section for a number of reasons. You must notify me as soon as possible to learn how to make up an excused absence from discussion section.

## Weekly Quiz:

Questions on weekly quizzes will be designed to help you stay up-to-date with the material, applying your knowledge to assess and solve problems. There will be 5 weekly quizzes graded for accuracy, allowing up to 2 attempts for full credit. Questions will be mostly multiple choice and related to the current week's lectures. The weekly quiz must be completed **by the designated Friday at 8:00pm**.

## Midterm/Final:

Everyone must take the online **midterm** and **final exam**, which will be timed, graded for accuracy and based on material covered throughout the course. Exam dates are set and posted, as indicated in the Schedule of Classes during enrollment, please plan accordingly.

The **midterm** is scheduled for **Saturday, July 16, 2022 from 9:00-10:50am**.

The **cumulative final** for **Saturday, July 30, 2022 from 8:00-10:59am**.

**NOTE: If you need to miss an exam due to a verifiable, unplanned emergency, you must notify me as soon as it is reasonable to do so. We will discuss your best options given your circumstances.**

## Grading

Grade assignments will be based on the percentage of total points earned. Assessments in this course exist to check your understanding, which will help your learning of the biological world. This course is not graded on a curve and no assignments will be dropped. The grading scale is as follows:

Grading Scale							
A+	>97.0%	B+	87.0 - <90.0%	C+	77.0 - <80.0%	D	60.0 - <70.0%
A	93.0 - <97.0%	B	83.0 - <87.0%	C	73.0 - <77.0%	F	<60.0%
A-	90.0 - <93.0%	B-	80.0 - <83.0%	C-	70.0 - <73.0%	<i>(Nonnegotiable grade breaks)</i>	

## Extra credit:

There will be several opportunities for extra credit, which may occur as necessary. You can earn 5 extra credit points (once) for meeting with me during my office hours and 5 extra credit points (once) for meeting with an IA during office hours, regardless of your discussion section enrollment and the assigned IA. Extra credit opportunities are always offered to the entire class, never individually.

## Late Policy:

Because of the condensed timeline of this course and the aim to provide you with a quick turnaround on grading, **we will not award points for any assignment submitted late or assessment time missed**. If you have a verifiable, unplanned emergency, we will discuss your best options.

## Regrade Policy:

If you believe that a grading error has been made, please contact your IA with an explanation of the error. If your IA agrees that an error has occurred, email me with an explanation, specifying which specific problem should be looked at and fully describe why you think the problem was wrongly graded. The regrade request must be delivered within one week after the assignment was graded. For the midterm and final, regrade requests will only be submitted and addressed directly via the assessment interface Gradescope. Regrading may lead to points added, deducted or no change.

## Professionalism:

This portion of the course grade is intended to motivate students to consider the consequences of their actions when interacting with peers, IAs and the instructor. Unprofessional interactions consume time and affect the dynamics of a class. By default, every student is assumed to be professionally mature. Hence, this component is awarded to every student at the beginning of the course. Based on observations by the teaching team, which includes but is not limited to one-on-one interactions, electronic communication, etc., your professionalism credit may be deducted. Course expectations are outlined below.

## Course expectations:

What I expect of you	What you can expect of me
<b>Be informed.</b> Read this syllabus carefully and completely so you understand the course structure and expectations. Follow directions in assessments and from the instructional team.	<b>Enthusiasm.</b> To be prepared for each class and to bring my enthusiasm for teaching to each lecture and office hour meeting.
<b>Be attuned.</b> Keep up with lectures and assignments, as each one builds on the previous one.	<b>Responsiveness.</b> I will do my best to respond to emails within 24 hours. Emails received on weekends may take longer.
<b>Ethical Standards.</b> A good attitude and maintenance of honest and ethical principles towards me, your classmates and the execution of the course. Do not harass and/or bully the instructional team or other students.	<b>Timely feedback.</b> To make every effort to return graded assignments in a timely manner and to post solutions as soon as is reasonably possible after the submission date.
<b>Integrity.</b> An honest, fair, responsible, respectful, trustworthy and courageous effort on all academic work and collaboration.	<b>Integrity.</b> To uphold integrity standards and create an atmosphere that fosters active learning, creativity, critical thinking and honest collaboration.
<b>Be flexible.</b> This course may be affected by the remote format or unavoidable emergencies, necessitating last-minute rescheduling.	<b>Reasonable accommodation.</b> To understand student situations that can arise; however, I will not make exceptions for one person that are not available to every other person in the course.

## Tentative breakdown of grading by course component:

Course component	Total Points	% of grade
<b>PROFESSIONALISM</b>	<b>20</b>	<b>2.0%</b>
<b>LECTURE</b>	<b>230</b>	<b>23.0%</b>
Pre-course Survey	25	2.5%
Lecture Study Guides (17 @ 10 points each)	170	17.0%
Final Reflection	35	3.5%
<b>DISCUSSION SECTION</b>	<b>150</b>	<b>15%</b>
Problem Sets (10 @ 10 points each)	100	10%
Section attendance and participation (10 @ 5 points each)	50	5%
<b>QUIZZES &amp; EXAMS</b>	<b>600</b>	<b>60%</b>
Weekly Quiz (5 @ 50 points each)	250	25%
Midterm	150	15%
Final	200	20%
<b>TOTAL</b>	<b>1000</b>	<b>100%</b>

## Tentative Course Schedule

**NOTE:** Hours are in Pacific Daylight Time.

WEEK	DAY	DATE	Synchronous Lecture Mon/Wed 5:00-7:50pm Study Guides by Fri 11:59am	Online Assignment Problem Sets Tues/Thurs by 11:59am	Synchronous Discussion Tues/Thurs
<b>1</b>	M	June 27	L1 Intro to Multicellular Life L2 Homeostasis and Feedback Loops	Pre-course Survey	
	Tu	June 28		PS 1 (scientific skills)	Discussion Section
	W	June 29	L3 Nutrition and the Digestive System L4 Metabolic Function and Dysfunction		
	Th	June 30		PS 2 (L1-L2)	Discussion Section
	F	July 1	L1-L2 Study Guides	<b>Quiz week 1 (L1-L2) before 8pm</b>	
<b>2</b>	M	July 4	No Class		
	Tu	July 5		PS 3 (L3-L4)	Discussion Section
	W	July 6	L5 Circulatory System L6 Respiratory System		
	Th	July 7		PS 4 (L5-L6)	Discussion Section
	F	July 8	L3-L6 Study Guides	<b>Quiz week 2 (L3-L6) before 8pm</b>	
<b>3</b>	M	July 11	L7 Innate Immune System L8 Adaptive Immune System		
	Tu	July 12		PS 5 (L7-L8)	Discussion Section
	W	July 13	L9 Urinary System		
	Th	July 14		PS 6 (L9)	Discussion Section
	F	July 15	L7-L9 Study Guides	<b>Quiz week 3 (L7-L9) before 8pm</b>	
<b>S. July 16, 9-10:50am Midterm: L1-L9</b>					
<b>4</b>	M	July 18	L10 Endocrine System L11 Biological Rhythms		
	Tu	July 19		PS 7 (L10-11)	Discussion Section
	W	July 20	L12 Reproductive System L13 Development		
	Th	July 21		PS 8 (L12-13)	Discussion Section
	F	July 22	L10-L13 Study Guides	<b>Quiz week 4 (L10-L13) before 8pm</b>	
<b>5</b>	M	July 25	L14 Neuron Signaling L15 Nervous System		
	Tu	July 26		PS 9 (L14-15)	Discussion Section
	W	July 27	L16 Sensory System L17 Motor System		
	Th	July 28		PS 10 (L16-17)	Discussion Section
	F	July 29	L14-L17 Study Guides	<b>Quiz week 5 (L14-L17) before 8pm</b>	
<b>S. July 30, 8-10:59am Final: L1-L17</b>				Final Reflection	

## Course and Campus Policies

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*All course materials are the property of the instructor, the course, and the University of California San Diego and may not be recorded, posted online, submitted to private or public repositories, or distributed. Doing so is a violation of the student code of conduct and copyright laws. Any suspected instances of a breach of academic integrity will be reported to the Academic Integrity Office.*

### **Academic Integrity and Originality:**

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 the class and suspension or dismissal from the University. So, think carefully before you act. Before you act, ask yourself the following questions: a) is my action honest, fair, respectful, responsible, and trustworthy, and b) is my action authorized by the instructor? If you are unsure, don't ask a friend, ask your instructor, instructional assistant, or the Academic Integrity Office. For more information on academic integrity, please visit [the webpage](#), read UC San Diego's [Policy on Integrity of Scholarship](#) and take the [integrity pledge](#). Pledges will be included in certain assessments.

### **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). 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.

### **Below are links to other UC San Diego policies and statements:**

- [UC San Diego Principles of Community](#)
- [UC San Diego Policy on Integrity of Scholarship](#)
- [Religious Accommodation](#)
- [Nondiscrimination and Harassment](#)
- [UC San Diego Student Conduct Code](#)

## Campus Resources for Support and Learning

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### **Learning and Academic Support**

#### [Ask a Librarian: Library Support](#)

*Chat or make an appointment with a librarian to focus on your research needs*

#### [Course Reserves, Connecting from Off-Campus and Research Support](#)

*Find supplemental course materials*

#### [Student Success Coaching Program](#)

*Peer mentor program that provides students with information, resources, and support in meeting their goals*

#### [Office of Academic Support & Instructional Services \(OASIS\)](#)

*Intellectual and personal development support*

#### [Writing Hub Consultations and Workshops](#)

*Improve writing skills and connect with a peer writing mentor*

### [Supplemental Instruction](#)

*Peer-assisted study sessions through the Academic Achievement Hub to improve success in historically challenging courses*

### [Tutoring - Content](#)

*Drop-in and online tutoring through the Academic Achievement Hub*

### [Tutoring - Learning Strategies](#)

*Address learning challenges with a metacognitive approach*

## **Support for Well-being and Inclusion**

### [Basic Needs at UCSD](#)

*Any student who has difficulty accessing sufficient food to eat every day, or who lacks a safe and stable place to live is encouraged to contact: [foodpantry@ucsd.edu](mailto:foodpantry@ucsd.edu) | [basicneeds@ucsd.edu](mailto:basicneeds@ucsd.edu) | (858) 246-2632*

### [Counseling and Psychological Services](#)

*Confidential counseling or consultations for psychiatric service and mental health programming*

### [Triton Concern Line](#)

*Report students of concern: (858) 246-1111*

### [Office for Students with Disabilities \(OSD\)](#)

*Supports students with disabilities and accessibility across campus*

### [Community and Resource Centers](#)

*As part of the [Office of Equity, Diversity, and Inclusion](#) the campus community centers provide programs and resources for students and contribute toward the evolution of a socially just campus: [diversity@ucsd.edu](mailto:diversity@ucsd.edu) | (858) 822-3542*

### [Undocumented Student Services](#)

*Programs and services are designed to help students overcome obstacles that arise from their immigration status and support them through personal and academic excellence*

### [Get Involved](#)

*Student organizations, clubs, service opportunities, and many other ways to connect with others on campus*