

---

# BILD2

## Multicellular Life

Fall quarter 2021

---

---

**C00** M/W/F 1-1:50pm (PT), York hall 2622

**D00** M/W/F 3-3:50pm (PT), Pepper Canyon Hall 106

**Instructor:** Jiyoung Park <j9park@ucsd.edu>

(Include BILD2 in the subject line of your emails)

**Course Website:** <http://Canvas.ucsd.edu>

---

### Important Note to in-person transitioning of this course

Welcome to BILD 2 at UC San Diego! For some of you, this may be your first time coming to campus. For others, it may have been a while since you were away from campus. While we are very excited to meet you in person, we will try our best to make this course pandemic resilient. That means, this course will be delivered in person while keeping all of us as safe as possible. For us, it is very important to help you learn biology and build your career AND take care of your physical and mental health. Please understand that as things are changing very quickly, class logistics and policy can be modified at any time during the quarter to comply with the guidance of UCSD or Health Authorities or change in Covid-19 situation. You will be notified, in advance, of any changes during regularly scheduled class.

We will ask you to take your responsibilities by following these:

- **Public Health Expectations and Best Practices**
  - Public health is a collective effort. Keeping the UC San Diego community healthy takes all of us following campus safety requirements to help prevent infection. You are also expected to follow university public health requirements and pursue personal protection practices to protect yourself and the others around you. These include:
- **Stay home if you're feeling ill.**
  - If you're not feeling well, complete the symptom screener and if needed, get tested for COVID-19. Do not come to campus unless given the all-clear.
- **Participating in the university's daily screening process.**
  - Everyone must complete a Daily Symptom Screener.
- **Participating in the university's testing program.**
  - All students are required to participate in the COVID-19 Testing program as required by their vaccination status.
- **Wear a well-fitting mask that covers your nose and mouth at all times.**
  - Everyone is required to wear masks indoors regardless of vaccination status. If you see someone not wearing a mask, or wearing it incorrectly, kindly ask them to mask up.
- **Monitor potential exposures and comply with contact tracing efforts.**
  - Look out for the daily updates and potential exposure list that the university sends out with building information and the dates of exposure.

## Course Description

An introduction to the physiological processes of diverse multicellular organisms at the systems, tissue, and cellular levels. BILD 1, The Cell, serves as a prerequisite for this course.

## Overall Course Outcomes

In the end of this course, you will be able to:

1. Understand the forms of multicellular organisms and their functions at the levels of organ systems, organs, tissues, and cells.
2. Expand the form-function relationship for diverse living environments, changes in external and internal conditions, and disease states of organisms.
3. Apply knowledge to assess and solve novel problems in a scientific way.

## Discussion sections and Instructional assistants (IAs)

Here, you can find the IA assigned to your section, who will be the primary point of contact when you have any questions regarding the course. You can also contact the instructor at [j9park@ucsd.edu](mailto:j9park@ucsd.edu).

Francheska Diaz	<a href="mailto:fbdiaz@ucsd.edu">fbdiaz@ucsd.edu</a>	C01 (F 3-3:50pm, PT)	CENTR 220
Nevil Patel	<a href="mailto:ngpatel@ucsd.edu">ngpatel@ucsd.edu</a>	C02 (F 4-4:50pm, PT)	CENTR 220
Nevil Patel	<a href="mailto:ngpatel@ucsd.edu">ngpatel@ucsd.edu</a>	C03 (F 5-5:50pm, PT)	CENTR 203
Eileen Ha	<a href="mailto:euha@ucsd.edu">euha@ucsd.edu</a>	C04 (F 6-6:50pm, PT)	CENTR 203
Zehraa Haddawi	<a href="mailto:zhaddawi@ucsd.edu">zhaddawi@ucsd.edu</a>	C05 (F 7-7:50pm, PT)	CENTR 203
Nicca Falah	<a href="mailto:nfalah@ucsd.edu">nfalah@ucsd.edu</a>	D01 (M 10-10:50am, PT)	CENTR 217A
Minji Kang	<a href="mailto:m5kang@ucsd.edu">m5kang@ucsd.edu</a>	D02 (Tu 8-8:50am, PT)	CENTR 203
Brian Kim	<a href="mailto:sek016@ucsd.edu">sek016@ucsd.edu</a>	D03 (F 5-5:50pm, PT)	CENTR 220
Kian Falah	<a href="mailto:kfalah@ucsd.edu">kfalah@ucsd.edu</a>	D04 (F 6-6:50pm, PT)	CENTR 220
Kian Falah	<a href="mailto:kfalah@ucsd.edu">kfalah@ucsd.edu</a>	D05 (F 7-7:50pm, PT)	CENTR 220

## Communications and Office hours

If you have any concerns or questions about the material, the instructor and your IA will be available to assist, during office hours, via Q&A board on Canvas, via email, or by scheduling an additional appointment. You can visit **any of the office hours below**. You can also **email your section IA or the instructor** for any questions. To improve the availability of the instructor and IAs, office hours and individual meetings can be held either in-person or online.

If an extended illness or circumstance including natural disasters affects your performance in class, please consult the instructor immediately.

	Email	Office hours
Dr. Jiyoung Park	<a href="mailto:j9park@ucsd.edu">j9park@ucsd.edu</a>	M/W/F 2-2:30pm (Outside the York Hall) Th 4-5 pm (Zoom, <a href="#">Click here</a> to join) or by appointment
Francheska Diaz	<a href="mailto:fbdiaz@ucsd.edu">fbdiaz@ucsd.edu</a>	M 3-4 pm ( <a href="https://ucsd.zoom.us/j/98702937665">https://ucsd.zoom.us/j/98702937665</a> )
Nevil Patel	<a href="mailto:ngpatel@ucsd.edu">ngpatel@ucsd.edu</a>	F 3-4pm ( <a href="https://ucsd.zoom.us/j/98175952080">https://ucsd.zoom.us/j/98175952080</a> )
Eileen Ha	<a href="mailto:euha@ucsd.edu">euha@ucsd.edu</a>	M 2-3 pm (Zoom, <a href="#">Click here</a> to join)
Zehraa Haddawi	<a href="mailto:zhaddawi@ucsd.edu">zhaddawi@ucsd.edu</a>	Tu 12-1 pm (Art of Espresso, Mandeville Auditorium)
Nicca Falah	<a href="mailto:nfalah@ucsd.edu">nfalah@ucsd.edu</a>	W 10-11 am (Zoom, <a href="#">Click here</a> to join)
Minji Kang	<a href="mailto:m5kang@ucsd.edu">m5kang@ucsd.edu</a>	Tu 11am-12pm (Zoom, <a href="#">Click here</a> to join)
Brian Kim	<a href="mailto:sek016@ucsd.edu">sek016@ucsd.edu</a>	M 5-6 pm ( <a href="https://ucsd.zoom.us/j/91419771244">https://ucsd.zoom.us/j/91419771244</a> )
Kian Falah	<a href="mailto:kfalah@ucsd.edu">kfalah@ucsd.edu</a>	Tu 2-3 pm (Zoom, <a href="#">Click here</a> to join)

## What do we value in this course?

**In-person learning is essential** to help you study this course, as we have seen over a year of pandemic. You will benefit a lot from connecting with one another in person, with the instructor, the IAs and your peers. So we will try our best to provide in-person instruction, while making sure everyone is as safe as possible. Here are the key thoughts that we want to share with you.

**In-person attendance will be highly recommended, unless you are ill.** You are encouraged to join the lectures and the discussion sections that you enrolled in. If you are feeling ill or you should quarantine, you can choose to participate in the class remotely at your place or asynchronously. To make our class more accessible and flexible, you can join any class time and any discussion sections listed (that includes any section from C00 or D00). Physical attendance on campus will not be recorded and not required for grades.

**Class materials will be available online, asynchronously.** Class slides will be available at the class site (Canvas) before class. Class meetings (lectures and sections) will be podcasted, which means you can watch the recordings afterwards. We will also try to broadcast the lectures live via Zoom, so anyone who cannot come to the campus can participate remotely.

**BUT it is important to complete assignments on time.** The reason we make class attendance flexible is so that you don't risk coming to class, when you are ill or you should quarantine. This does not mean that you can procrastinate. To help you follow the course schedule, you will need to complete three sets of review questions and one wrap-up question every week online.

**Also academic integrity is important.** Exams must be taken **in person** in the designated classroom during the registered class hours that you enrolled in. If you are not able to take exams within this time, because you are **feeling ill or you should quarantine**, or because a **verifiable, unplanned emergency** happens, you **MUST** notify the instructor immediately to discuss your best options given your circumstances.

## Basic Course structure

Here is how a typical week may look for you.

Day	What to Do
Monday	Join the live class meeting
Tuesday	Complete Daily review questions
Wednesday	Join the live class meeting
Thursday	Complete Daily review questions
Friday	Join the live class meeting
Saturday	Complete Daily review questions Complete Weekly Wrap Up Questions

## Class Materials and Tools

### Canvas (Course website)

All course related information including announcements, lecture slides, daily review questions, and practice problems will be found on Canvas. You can go to <http://Canvas.ucsd.edu>, and find BILD2 Fall quarter 2021. It is your responsibility to access the course website regularly to participate in classes and discussion sections. Please check the Canvas site and your UCSD e-mail regularly to view announcements, submit assignments, and ensure your grade totals are accurate. Turning on notifications on Canvas is highly encouraged.

- **Where are the class slides?** Go to the weekly modules such as **Week 1 & 2 module** in the screenshot and find pages assigned for each day. For example, go to “**Ch. 40 Animal Structure 1**” page to find lecture slides and suggested readings. Weekly modules will be available on Saturdays before each week.
- **How can I watch the recordings of the class meetings and the discussion sections, if missed?** Go to the “**Media Gallery**” link on the left side. Alternatively, your IA may post the section recordings in their module in Canvas or announce where you can find them.
- **How can I join Zoom for online office hours and other meetings?** Go to the “**Zoom LTI Pro**” link on the left side and click on the tab “**Upcoming Meetings.**” There, you can see the scheduled Zoom meetings for office hours and others. To get your free Zoom PRO account, go to: <https://ucsd.zoom.us/>. Make sure that Zoom is installed on your electronic device before using it for the first time.

## Recommended Text:

*Campbell Biology 12<sup>th</sup>* by Urry, Cain, Wasserman, Minorsky and Orr (Pearson, 2020). Older editions such as 10<sup>th</sup> or 11<sup>th</sup> are acceptable.

## Grading & Course components

Assessments in this course are *not* to judge you, but to check your understanding that will *help your learning*. So please let your instructor know, if you have any questions on the course content or any concern regarding assessments.

Assignment	Points	#	Total points	Percent
<b>Daily Review questions</b> (Drop the lowest)	3	26	75	21%
<b>Weekly Wrap Up questions</b> (Drop the lowest)	5	10	45	12%
<b>Exams</b> (Drop the lowest)	80	4	240	67%
<b>Extra credit opportunities</b> (For details, check #7 below)			up to 15	
<b>Total</b>			<b>360 + a</b>	<b>100%</b>

### Grading criteria

Grade assignments will be based on the percentage of total points earned. We do not decide your grade, but rather you as a student do the work to earn your grade. **Grading in this course will be linear, not curved. Final grades will not be rounded up.** The point cut-offs listed below will be strictly followed when assigning final letter grades.

≥ 97.0%	A+	94.0% to < 97.0%	A	90.0% to < 94.0%	A-
87.0% to < 90.0%	B+	84.0% to < 87.0%	B	80.0% to < 84.0%	B
73.0% to < 80.0%	C+	66.0% to < 73.0%	C	60.0% to < 66.0%	C-
50.0% to < 60.0%	D	< 50.0 %	F		

### 1. Class

Each class will be composed of short instruction that explains important concepts followed by questions that can help you check your understanding. Your answers to the questions will not be graded, but it will be a very efficient way to solidify your learning and to prepare for exams.

You are highly encouraged to join the class that you enrolled in. If you are feeling ill or you should quarantine, you can choose to participate in the class remotely at your place or asynchronously. To make our class more accessible and flexible, you can join any class time either at 1pm (C00) or at 3pm (D00) each day. Physical attendance on campus will not be recorded and not required for grades.

## 2. Daily Review Questions

After reviewing the lecture materials, students will need to complete daily review questions to test their understanding of the concepts that were discussed. Each day, you will answer 3 multiple choice questions, each of which will be worth 1 point. Up to 2 attempts are allowed to get full credit. They are **due the day after the class meeting**. The grade on the day with the lowest score will be dropped from the final grade.

## 3. Discussion Section

Discussion sections are designed to help you apply your knowledge and exercise your skills, by reviewing the lecture materials in groups and solving practice problems which exam questions will be based on. Answer key to Practice problems will be posted on Canvas after one week.

You are encouraged to join the discussion section that you enrolled in. If you are feeling ill or you should quarantine, you can choose to participate in the section remotely at your place or asynchronously. To make our class more accessible and flexible, you can attend **any discussion section from C00 or D00 regardless** of your enrollment. It is highly encouraged to join at least one section every week, either in-person or asynchronously, although in-person section attendance will not be graded.

The sections will start **on Friday, September 24<sup>th</sup>, Monday, September 27<sup>th</sup> or Tuesday, September 28<sup>th</sup>**. Section recordings will be available for those who cannot attend.

## 4. Weekly Wrap Up questions

By each Saturday starting from week 2 (October 2), you need to submit your answer to weekly Wrap Up questions. They will be free response questions, which can be part of practice problems or learning objectives covered in the week. While you do not need to answer each question correctly, your responses must be meaningful and demonstrate effort and critical thinking to receive full credit. The grade on the day with the lowest score will be dropped from the final grade.

## 5. Exams

Exams are designed to facilitate applying knowledge to solve novel problems in a scientific way. There will be **three exams** and one **cumulative final exam** throughout the course. All exams including the cumulative final exam will be worth 80 points, and the lowest one will be dropped from the final grade. Questions could be in various formats, including multiple choice, fill-in and free response questions. Each exam except the final exam will cover information from previous lectures since the last exam. Materials presented in class material, lectures, suggested readings, discussion sections, and practice problems can be covered.

Exams must be taken **in person in the designated classroom during the registered class hours** that you enrolled in. For example, if you enrolled in the **C00 class**, you will need to take your midterms at **York hall 2622 between 1pm and 1:50pm** on the exam dates. If you enrolled in **D00 class**, you will need to take your midterms at **Pepper Canyon Hall 106 between 3pm and**

**3:50pm** on the exam dates. Final exam will be Monday, Dec 6 at 11:30am for C00, and Friday, Dec 10 at 3pm for D00. The final exam locations will be announced in the class. As the exam dates are set and posted, they will not be changed, so plan your quarter accordingly. For more information about exam dates and course topics, please see the *Class schedule* section below.

If you are **feeling ill or you should quarantine**, or a **verifiable, unplanned emergency** happens, you **MUST** notify the instructor of the problem as soon as it is reasonable to do so. We will discuss your best options given your circumstances.

## 6. Supplemental instruction (SI) and Study groups

Supplemental Instruction (SI) sessions offer students the opportunity to master course material within a community of learners. It is offered through the Academic Achievement Hub at UC San Diego, and has a separate canvas site. (More information can be found on: <https://aah.ucsd.edu/supplemental-instruction/>) The SI program gives students a safe and inclusive environment to engage with, ask questions, and review lecture material with their peers. SI sessions are facilitated by Peer Leaders who have successfully completed the course at UC San Diego and are trained in facilitating sessions to engage students in active problem-solving and discussion.

**SI leader: Flora Wong ([fswong@ucsd.edu](mailto:fswong@ucsd.edu))**

### Schedule:

- Monday 5:30pm - 6:50pm: Virtual (Zoom link provided to you by the Academic Achievement Hub through email)
- Tuesday 7:30pm - 8:50pm: In-Person (Literature Building, Room 210)

## 7. Extra credit opportunities

- 3 points for **meeting with Prof. Park or an IA during office hours** or another meeting. You will earn the points for your first meeting, but you can visit us as many times as you want!
- 3 points for **“About Me” one pager**. You can submit a 1-page Google slide to introduce yourself and this one pager will be played at the beginning of each class. You will earn points for your first one pager.
  - You could include your name, class year, hometown, photo of yourself (if you are comfortable to share) or photo of something meaningful to you, 1 sentence of hobby or interest you have.
  - If you have an event to advertise, include that!
  - If you want to share any music before the class, include the link for the music.
- 2 points each for **3 exam reflections**. After Exams 1, 2 and 3, you can complete reflection questions about how you prepared for the exam and how the course is going.
- 3 points for **CAPE survey**: if more than 80% of the class complete CAPE survey in a constructive and professional way, everyone in this class will earn 3 extra credit points.

## 8. Late policy

Weekly Wrap Up quiz and daily review questions can be submitted **after due dates with late penalties**. Late submissions will be given half-credit for one day after the due date, and after that they will be given no credit.

Remember that for all assignment groups, you can **drop one without any impact** on your score. That means if you happen to miss one or turn it in late, or your life is too busy a certain week, it will not negatively impact your course score.

## 9. Regrades

If a grading error has been made, you should submit a re-grade request via email or Gradescope to your Instructional Assistant or Dr. Park. Students who submit items for re-grading understand that we may re-grade the entire item and the score may go up or down.

### Class schedule (\*subject to change)

Week	Date	Lecture	Reading (Posted on Canvas)
1	Sep 24 (F)	Animal Structure	Chapter 40
2	Sep 27 (M)	Animal Structure Digestion & Nutrition	Chapter 40 Chapter 41
	Sep 29 (W)	Digestion & Nutrition	Chapter 41
	Oct 1 (F)	Circulation	Chapter 42
3	Oct 4 (M)	Circulation Gas Exchange	Chapter 42
	Oct 6 (W)	Gas Exchange	Chapter 42
	Oct 8 (F)	Nervous System I	Chapter 48
4	Oct 11 (M)	<b>Exam 1 (Ch. 40, 41, 42)</b>	
	Oct 13 (W)	Nervous System I & II	Chapter 48, 49
	Oct 15 (F)	Nervous System II	Chapter 49
5	Oct 18 (M)	Sensory Systems	Chapter 50
	Oct 20 (W)	Sensory Systems Muscle Control	Chapter 50
	Oct 22 (F)	Muscle Control	Chapter 50
6	Oct 25 (M)	Kidney Function	Chapter 44
	Oct 27 (W)	<b>Exam 2 (Ch. 48, 49, 50)</b>	
	Oct 29 (F)	Kidney Function	Chapter 44
7	Nov 1 (M)	Plant Hormone	Chapter 39
	Nov 3 (W)	Plant Hormone Plant Nutrition and Transport	Chapter 39 Chapter 36, 37
	Nov 5 (F)	Plant Nutrition and Transport	Chapter 36, 37
8	Nov 8 (M)	Plant Development and Reproduction	Chapter 35, 38
	Nov 10 (W)	Hormone Action	Chapter 45
	Nov 12 (F)	Hormone Action	Chapter 45
9	Nov 15 (M)	Immune System I	Chapter 43
	Nov 17 (W)	<b>Exam 3 (Ch. 35, 36, 37, 38, 39, 44, 45)</b>	
	Nov 19 (F)	Immune System II	Chapter 43
10	Nov 22 (M)	Immune System III	Chapter 43
	Nov 24 (W)	Animal Reproduction	Chapter 46
	Nov 26 (F)	<b>NO CLASS (Thanksgiving holiday)</b>	
11	Nov 29 (M)	Animal Reproduction Animal Development	Chapter 46 Chapter 47
	Dec 1 (W)	Animal Development	Chapter 47
	Dec 3 (F)	Review session	
	Exam	<b>Final exam (Cumulative with emphasis on new material)</b> C00: Monday, Dec 6 at 11:30am D00: Friday, Dec 10 at 3pm	

The exam dates are set and will not be changed, so plan your quarter accordingly.

## Student Resources for Support and Learning

### Learning Resources

[Writing Hub](#)

[Supplemental Instruction](#)

[Content Tutoring](#)

[Learning Strategies Tutoring](#)

### Accessibility

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: <https://disabilities.ucsd.edu/>.  
osd@ucsd.edu | 858. 534.4382

### Technical Support

For help with accounts, network, and technical issues:  
<https://acms.ucsd.edu/contact/index.html>

### [Mental Health Services](#)

Counseling and Psychological Services (CAPS) provides individual, group, couples, and family psychotherapy to registered undergraduate and graduate students. Instructors can contact the **Triton Concern Line** for consultation or concerns about a student. They can also request a training to help identify and work with distressed students.

Office 858-534-3755 | Phone & Crisis: 858-534-3755 | Emergencies: 911

## UC San Diego Academic Policies

**Academic Accommodations:** Students requesting accommodations for this course due to a disability need to 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. Please note that instructors are unable to provide accommodations unless they are first authorized by OSD.

Contact the OSD for further information:  
858.534.4382 (phone) osd@ucsd.edu(email) <http://disabilities.ucsd.edu>(website)

### Discrimination and harassment

The University of California, in accordance with applicable federal and state laws and university policies, does not discriminate on the basis of race, color, national origin, religion, sex, gender,

gender identity, gender expression, pregnancy (including pregnancy, childbirth, and medical conditions related to pregnancy or childbirth), physical or mental disability, medical condition, genetic information, ancestry, marital status, age, sexual orientation, citizenship, or service in the uniformed services (including membership, application for membership, performance of service, application for service, or obligation for service in the uniformed services). The university also prohibits harassment based on these protected categories, including sexual harassment, as well as sexual assault, domestic violence, dating violence, and stalking. The nondiscrimination policy covers admission, access, and treatment in university programs and activities.

If students have questions about student-related nondiscrimination policies or concerns about possible discrimination or harassment, they should contact the Office for the Prevention of Harassment & Discrimination (OPHD) at (858) 534-8298, [ophd@ucsd.edu](mailto:ophd@ucsd.edu), or [reportbias.ucsd.edu](http://reportbias.ucsd.edu).

Campus policies provide for a prompt and effective response to student complaints. This response may include alternative resolution procedures or formal investigation. Students will be informed about complaint resolution options.

A student who chooses not to report may still contact CARE at the Sexual Assault Resource Center for more information, emotional support, individual and group counseling, and/or assistance with obtaining a medical exam. For off-campus support services, a student may contact the Center for Community Solutions. Other confidential resources on campus include Counseling and Psychological Services, Office of the Ombuds, and Student Health Services.

CARE at the Sexual Assault Resource Center  
858.534.5793 | [sarc@ucsd.edu](mailto:sarc@ucsd.edu) | <https://care.ucsd.edu>

Counseling and Psychological Services (CAPS)  
858.534.3755 | <https://caps.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 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. You can learn more about academic integrity at [academicintegrity.ucsd.edu](http://academicintegrity.ucsd.edu).

(Source: Bertram Gallant, T. (2017). Teaching for integrity. UC San Diego Academic Integrity Office.)

Students suspected of academic integrity violations on exams will be invited to Zoom follow-up meetings where they will be asked to (in real time, on video) justify their answers (before the graded exams or solutions are released). If the instructor isn't convinced during the meeting, or the student refuses to participate, they're submitted for academic integrity violations.