

## Welcome to BILD 1 “The Cell”

The aim of this course is to introduce you to the fundamental concepts of cell and molecular biology through the exploration of biological molecules, cellular structure, bioenergetics and genetics. Completing this course will give you a strong foundation for additional biology courses, an understanding of the complexities of the natural world, and an appreciation of how cellular and molecular biology are relevant in your life.

### Lecture:

MTWTh 9:30a-10:50a in [Ledden Auditorium](#)

### Discussion Sections\*:

MW 12:00p-12:50 pm ([HSS 2321](#))

MW 1:00p-1:50 pm ([HSS 1128A](#))

MW 2:00p-2:50 pm ([HSS 1128A](#))

MW 3:00p-3:50 pm ([HSS 1128A](#))

### UC Course Credits: 4

### Instructor:

Marie Adomako

[madomako@ucsd.edu](mailto:madomako@ucsd.edu)

Office: [AP&M 4842](#)

Office Hours: MW 11a-12p or by appointment

### IA\*s\*:

Tami Gilderman

[tgilderm@ucsd.edu](mailto:tgilderm@ucsd.edu)

David Gervasio

[dgervasi@ucsd.edu](mailto:dgervasi@ucsd.edu)

Jacynda Laferriere

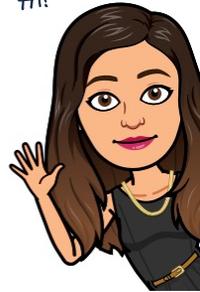
[jlaferr@ucsd.edu](mailto:jlaferr@ucsd.edu)

\*Check Canvas for IA sections and office hours

I'm here to help you learn! Feel free to talk to me before or after class, or contact me via email using your UCSD email

account. When emailing me, please put “BILD 1” in the subject line and allow 24 hours for a reply. If my office hours don't work for you, email me and we will find a time that works for both of us. If you have a question about understanding concepts, an in-person conversation is a better option than email; please attend office hours or schedule alternate office hours with me. Please email questions regarding grades, assignments, and exams.

Hi!



**Marie Adomako**  
Pronouns: She/Her/Hers  
B.S. and M.S. Microbiology;  
Idaho State University

## What will you learn in this course?

By the end of the course, students will be able to:

1. Explain the cellular functions of macromolecules and organelles, and show how their functions help to maintain the cellular environment.
2. Diagram the flow of energy production and consumption of a cell.
3. Describe how biological information is stored, expressed, and regulated.
4. Explain how traits are inherited and how mutations arise, and connect how mutations affect the regulation or expression of biological information.
5. Interpret experimental data and incorporate experimental evidence into current biological models.

## Required Course Materials

- ❑ **Campbell Biology (11th edition)** by Urry, Cain, Wasserman, Minorsky and Reese (Pearson 2017) can be purchased at the university bookstore. A few copies of the textbook are reserved in the library.
- ❑ **iClicker** An iClicker is required for this course and can be purchased at the university bookstore. The room code is CA. iClicker participation will be graded starting Tuesday, 7/2. Please register iClickers through Canvas by Monday, 7/8.
- ❑ **Canvas** will be the learning platform used for this class. You can access the course materials by logging in with your UCSD credentials at <https://canvas.ucsd.edu/>

## Accessibility and Inclusion

Everyone will come to this course with different backgrounds, knowledge, and perspectives. We want to create a classroom culture that respects and revels in this human diversity, and I hope you will join me in creating a class that upholds these values to further enhance our learning as a community. If you have any concerns related to inclusivity or feel your identities (race, gender, sexuality, religion, ability, etc.) are not being honored, please let me know! **Accommodations can be made for students with a letter from the OSD\***. Please email me to talk with me privately if a conflict arises that interferes with your ability to learn or participate in this class to your fullest abilities. Your request for an equitable accommodation will be held in the strictest confidence. \*<https://disabilities.ucsd.edu/> | osd@ucsd.edu | 858. 534.4382

# Assessments and Basis for Your Final Grade

Assessment	Points
Midterm 1	100 <i>or</i> 0
Midterm 2	100 <i>or</i> 0
Final Exam	150 <i>or</i> 250*
4 x Section Exercises	4 x 25
Reading Quizzes	50
Participation	50
<b>TOTAL</b>	<b>550</b>

<b>A+</b>	97-100%
<b>A</b>	93-97%
<b>A-</b>	90-93%
<b>B+</b>	87-90%
<b>B</b>	83-87%
<b>B-</b>	80-83%
<b>C+</b>	77-80%
<b>C</b>	73-77%
<b>C-</b>	70-73%
<b>D</b>	60-70%
<b>F</b>	<60%

## Regrade Requests

We all make mistakes! If you think an assignment or exam was graded in error, submit a **request by email within 2 days of receiving your grade**. Include a written description of the error, including which question you are concerned about and why you think the grade is mistaken. No in-person requests will be considered. The regrade option is to safeguard you from genuine mistakes in grading; there is no guarantee your score will go up.

\*If you miss a midterm exam, or if you do better on the final than on one of your midterms, your final exam will be worth more points to compensate. Only one midterm exam can be dropped; the final exam cannot be dropped. The grading scheme that benefits you the most will be chosen automatically. If you miss the final exam and you are in academic good standing, you may be eligible for an incomplete.

*Midterm 1:* Thursday, July 11; during normal class time  
*Midterm 2:* Tuesday, July 23; during normal class time  
*Final Exam:* Saturday, August 3; 8:00a – 10:59a; location TBA

The grades in this class will not be curved; you aren't competing with each other for points. I reserve the right to adjust the grading scale, but any changes will always work in your favor.

## Exams

There will be two midterm exams and one final exam in the course. Each exam will contain multiple true/false, fill-in-the-blank, short answer, and essay type questions. The final exam will be cumulative; two-thirds of the questions will be on material from Unit 3, the remaining questions will be on material from Units 1 and 2.

## Section Exercises

There will be four worksheet exercises in discussion section that will combine: a short quiz of lecture material covered in class that day, data interpretation, and group work. Check the Course Schedule for the dates of these exercises. If you cannot attend section for one of these exercises, you must contact me via email before your absence to arrange a makeup.

## Reading Quizzes

Each Lecture Topic (check the Reading Schedule) has assigned reading and a 5 point quiz administered through Canvas. Quizzes are open book, and you are allowed 2 attempts for each quiz. Quizzes are due before class starts. Your total quiz grade will be calculated from your 10 highest quiz scores.

## Participation

To receive a complete participation grade, you must earn 50 participation points from: attending lecture and answering clicker questions, attending sections that do not have a section exercise, or submitting "muddiest points" on Canvas.

**Clicker questions:** In every lecture, clicker questions will challenge you to apply what you've just learned. Every day you will have the opportunity to earn 5 points. In each class you can receive 2 Participation Points by submitting an answer to 75% of questions (with no penalty for wrong answers), and up to 3 Performance Points by answering questions correctly (1 correct answer = 1 Performance Point). There are more than 3 clicker questions per class, so even if you get some wrong you may still get full points. Check often to make sure your clickers are being recorded.

**Attending discussion section:** You can receive 5 points for attendance and participation at your discussion section. These points are awarded at the discretion of your section IA. Discussion sections with exercises do NOT count for attendance points.

**Muddiest Point:** For every lecture, you can receive 1 point for submitting a "muddiest point" on Canvas, due by 8:00a, before the next class. On canvas, find the Muddiest Point assignment for that lecture, and describe what concept from the day's lecture you found most unclear or most confusing.

## How to Succeed in This Course

**Read the Textbook:** Reading assignments in this course are structured to encourage you to familiarize yourself with the terms and vocabulary that will be discussed in lecture.

You get two opportunities to take each quiz, with no penalty, so use the Reading Quizzes as an opportunity to test your own understanding.

**Attend Lecture:** Participation points in this course are used to encourage you to attend and participate in problem solving activities during lecture. Please come to class ready to participate and discuss with your peers. Read more about how these activities can help you [here](#).

I understand that some absences are unavoidable; all lectures will be podcasted (<https://podcast.ucsd.edu/>), and lecture slides will be made available on Canvas *after* lecture.

I highly encourage the practice of handwriting lecture notes. Did you know that taking notes by can help your learning? Read more [here](#).

### Get the most out of your reading quizzes:

1. Read the assigned text.
2. Take the reading quiz (without the book!)
3. If you missed a question, take the quiz again, using the book to help you find the right answer.

### Academic Integrity

Academic integrity is an essential part of creating an inclusive and fair learning community. Academic dishonesty (including, but not limited to: cheating, plagiarizing, answering with someone else's clicker) fractures the playing field by giving some students an unfair advantage. Students can uphold their responsibility to this community by completing the academic work assigned without unauthorized aid. Cheating will not be tolerated; students found to have committed academic dishonesty will be referred to the UCSD Academic Integrity Office and may receive a failing grade for the course.

**Technology Policy:** Technology is an integral part of our lives and a valuable tool. If you are using laptops or tablets to take notes, please respect your peers and me as your instructor by staying focused and refraining from web browsing, social media, gaming, etc. during class time.

## UC San Diego Academic Policies

[UCSD Principles of Community](#)  
[UCSD Student Conduct Code](#)

### Religious Accommodation

It is the policy of the university to make reasonable efforts to accommodate students having bona fide religious conflicts with scheduled examinations by providing alternative times or methods to take such examinations. If a student anticipates that a scheduled examination will occur at a time at which his or her religious beliefs prohibit participation in the examination, the student must submit to the instructor a statement describing the nature of the religious conflict and specifying the days and times of conflict. The instructor will attempt to provide an alternative, equitable examination that does not create undue hardship for the instructor or for the other students in the class.

### 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](mailto: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.

## Student Resources

### Learning Resources

[Supplemental Instruction](#)

[Tutoring](#)

[Technical Support](#)

Any student who has difficulty accessing sufficient food to eat every day, or who lacks a safe and stable place to live, and believes this may affect their performance in this course, is encouraged to contact:

[foodpantry@ucsd.edu](mailto:foodpantry@ucsd.edu)

[basicneeds@ucsd.edu](mailto:basicneeds@ucsd.edu) | (858)246-2632

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>

## Course Schedule

Unit 1: The parts of a cell					
Week 1	M	7/1	Topic 1: Intro/Chemistry of Life		
	T	7/2	Topic 2: Macromolecules		
	W	7/3	Topic 3: Tour of the Cell	<b>Section Exercise #1</b>	
	Th	7/4	<b>NO CLASS! Happy 4th of July!</b>		
Week 2	M	7/8	Topic 4: Plasma Membrane		
	T	7/9	Topic 5: Metabolism		
	Unit 2: The flow of energy in a cell				
	W	7/10	Topic 6: Cellular Respiration	<i>In-Section Review; Topics 1-5</i>	
Th	7/11	<b>MIDTERM 1: Topics 1-5</b>			
Week 3	M	7/15	Topic 7: Photosynthesis	<b>Section Exercise #2</b>	
	T	7/16	Topic 8: Cell Communication		
	W	7/17	Topic 9: Cell Cycle		
	Th	7/18	Topic 10: Meiosis		
Week 4	Unit 3: The flow of information in a cell				
	M	7/22	Topic 11: Mendel and Genes	<i>In-Section Review; Topics 5-10</i>	
	T	7/23	<b>MIDTERM 2: Topics 6-10</b>		
	W	7/24	Topic 12: Chromosomal Inheritance	<b>Section Exercise #3</b>	
	Th	7/25	Topic 13: Molecular Inheritance		
Week 5	M	7/29	Topic 14: Gene Expression		
	T	7/30	Topic 15: Gene Regulation		
	W	7/31	Topic 16: Special Topic: Gene Editing	<b>Section Exercise #4</b>	
	Th	8/1	Final/Class Review		
	Sa	8/3	<b>FINAL EXAM</b>		

The course schedule is plan, and not a contract. This schedule is subject to change with reasonable advance notice, as deemed appropriate by the instructor.

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