

COURSE SYLLABUS

Instructor: Dr. Catalina Reyes

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Office: HS&S 1145A

Office hours: Wednesday 9 -10 AM
10 -11 AM

Zoom <https://ucsd.zoom.us/j/93084280095>

One-on-one or small group meetings are also available at selected times. Please email me if you would like to find a time to meet in person or over Zoom.

ELECTRONIC COMMUNICATION

Please contact your Instructional Assistant (IA) for general inquiries. Make sure to include **BILD 2** in the subject line. Due to the large number of students in the class we will **NOT** be able to answer individual questions about the content of the lectures by email. To get your questions answered please attend Catalina's office hours, IAs office hours, discussion sections, schedule a one-on-one meeting with Catalina or ask during or after class. If you have questions about course organization, please refer to the Syllabus or post your question on the Canvas discussion board.

OBJECTIVES FOR THE COURSE

1. Introduce you to physiological processes of animals and plants.
2. Learn how these processes and different systems work together to maintain homeostasis.
3. Learn the anatomy of the systems discussed in class.
4. Learn anatomical, physiological, and biomedical terms.
5. Learn how to read graphs and images.
6. Predict how changes or disturbances in cells, tissues or organs affect function.
7. Ability to apply the knowledge acquired to solve physiological and medical problems.
8. Develop critical thinking skills to apply what you have learnt to solve scientific problems.

TO SUCCEED IN THIS COURSE, YOU MUST DO THE FOLLOWING:

1. Work hard. Go over the material every week.
2. Learn the terminology and concepts.
3. Learn to critically think about physiology.
4. Read through the power point presentations before lectures.
5. Take notes while listening to the lectures.
6. Attend a discussion section.

COURSE STRUCTURE**LECTURE:****CLASS A00** - MWF 8-8:50 AM

MOS 0114

CLASS B00 - MWF 12-12:50 PM

PETER 110

DISCUSSION SECTIONS:

During sections, the IAS will cover problem sets, you will be able to ask questions about the lecture material and important material will be reviewed.

Discussion sections are MANDATORY. You will be able to attend any discussion section **if there is space**. Please contact the IA to inquire about switching sections. The graduate IA will approve or deny your request by week 2.

| CLASS A00 - IA | email | Section | Room | Section time |
|----------------------|--|------------------|---------|---------------|
| Spencer Brown | scbrown@ucsd.edu | A01 | CSB 005 | W 12-12:50 pm |
| | | A02 | CSB 005 | W 1-1:50 pm |
| | | A03 | CSB 005 | W 2-2:50 pm |
| | | A04 | Remote | W 6-6:50 pm |
| Rachana Balakrishnan | rabalakrishnan@ucsd.edu | Undergraduate IA | | |
| Pierce Chu | p1chu@ucsd.edu | Undergraduate IA | | |
| Xinyu Wen | x5wen@ucsd.edu | Undergraduate IA | | |
| Justin Mya | jmya@ucsd.edu | Reader | | |

| CLASS B00 - IA | email | Section | Room | Section time |
|------------------|--|------------------|---------|--------------|
| Yuren Tao | y9tao@ucsd.edu | B01 | CSB 004 | F 2-2:50 pm |
| | | B02 | CSB 004 | F 3-3:50 pm |
| | | B03 | CSB 004 | F 4-4:50 pm |
| | | B04 | Remote | F 5-5:50 pm |
| Zachary Larson | zlarson@ucsd.edu | Undergraduate IA | | |
| Nathan Powel | nbpowell@ucsd.edu | Undergraduate IA | | |
| Sruthika Prakash | sprakash@ucsd.edu | Undergraduate IA | | |
| Jake Rendler | jrendler@ucsd.edu | Reader | | |

The lecture schedule (see below) is subject to change.

| Date | Topic | Readings |
|---------------------------|---|-----------------|
| Week 1 Apr 1-5 | • Welcome and Syllabus | |
| | • Multicellular life and Surface Area to Volume ratios | Chapter 40 |
| | • Homeostasis and Feedback loops | Chapter 40 |
| Week 2 Apr 8-12 | • Homeostasis and Thermoregulation | |
| | • Endocrine system | Chapter 45 |
| | Assignment 1 DUE Friday, Apr. 12 by 9 PM | |
| Week 3 Apr 15-19 | • Endocrine system cont. | Chapter 45 |
| | • Nervous system structure and RMP | Chapter 48, 49 |
| Week 4 Apr 22-26 | • Nervous system Action potentials | Chapter 48, 49 |
| | Midterm 1 – W - Apr 24 – 7 PM (A: MOS 0113 and B: PETER 110) | |
| | • Nervous system Synapse communication between cells | Chapter 48, 49 |
| | Assignment 2 DUE Friday, Apr. 26 by 9 PM | |
| Week 5 Apr 29- My 3 | • Nervous system: The brain and sensory physiology | Chapter 50 |
| | • Muscle control | Chapter 50 |
| | • Muscle control cont. | |
| | Assignment 3 DUE Monday, May 6 by 9 PM | |
| Week 6 My 6-10 | • Circulation | Chapter 42 |
| | • Circulation | Chapter 42 |
| Week 7 My 13-17 | • Gas Exchange | Chapter 42 |
| | • Kidney function | Chapter 44 |
| Week 8 My 20-24 | • Kidney function | Chapter 44 |
| | Midterm 2 – W - May 22 – 7 PM (A: MOS 0113 and B: PETER 110) | |
| | • Digestion and nutrition | Chapter 41 |
| | Assignment 4 DUE Friday, May 24 by 9 PM | |
| Week 9 My 27-31 | NO CLASS May 27 | |
| | • Development | Chapter 47 |
| | • Reproduction | Chapter 46 |
| | Assignment 5 DUE Monday January 3 by 9 PM | |
| Week 10 Jn 3-7 | • Reproduction | Chapter 46 |
| | • Immune system 1 | Chapter 43 |
| | • Immune system 2 | Chapter 43 |
| June 8 | Final Exam – cumulative – Saturday - 8 AM | |

PROBLEM SETS

Problem sets will be posted on Canvas weekly. These questions are intended to further your understanding of the concepts learnt in lecture. Problem sets will be covered during discussion sections and the answers will be posted before the midterms. Problem sets are for practice, and you do not need to turn them in.

COURSE TOOLS

COURSE WEBSITE: <https://canvas.ucsd.edu/>

Weekly To-Do-Lists, announcements, lectures slides, assignments, grades, and lecture recordings will be posted here. PLEASE check on a regular basis.

On the first day of class I will demonstrate how to use Canvas and how to access all the course resources.

PODCAST

Lectures and most discussion sections are in person. All lectures will be podcasted. You can access these materials through Media Gallery in Canvas or at www.podcast.ucsd.edu

Midterms and the final exam are **IN-PERSON**.

COURSE MATERIALS

OPTIONAL TEXTBOOK: Campbell Biology, 8th, 9th, 10th, or 11th editions. **IMPORTANT** – the textbook is **NOT** mandatory.

However, you have been automatically enrolled in the UC San Diego Inclusive Access program. This means that you are provided with a digital copy of the textbook at a discounted price of \$39. A charge for the book will be added to your student account and will appear as “Course Materials Central Charge”.

Your Opt-out deadline is April 13, 2024

Opt-out Portal Link: [UC San Diego Inclusive Access Opt-Out Portal](#)

Please contact the bookstore at textbooks@ucsd.edu if you have any difficulty using your digital book or opting out.

Even though the text is **not required**, and the exams will **only** include the material seen in class, I provided recommended readings from the text for each topic. During the quarter journal articles may be posted as assignments.

EXAMS, ASSIGNMENTS AND GRADING:**1. CLASS PARTICIPATION**

Active participation in lectures is important for your learning. There will be several opportunities during lectures to participate. **Participation points will be 3% of your grade.**

Lecture participation points will start counting on the Monday of week 2. To accommodate for technology issues, absences or any other circumstances, full attendance points will be given if you attend and click in **15 lectures out of 24**. This allows you to miss 3 weeks (9 lectures) of class after the first week. If you are sick, please use these dropped lectures and stay home. Attendance will not be taken on midterm days.

If you have a situation or condition that will cause you to miss more than three weeks please contact us right away, so we can consider other options.

2. DISCUSSION PARTICIPATION

You will be required to attend 6 out of the 10 discussion sections. **Attendance to Discussion sections will be 5% of the final grade.**

3. ASSIGNMENTS

- Assignments are biweekly short exercises evaluating lecture material.
- The assignments can be different formats (multiple choice, True/False, short answers, or questions based on a reading)
- The assignments will be posted every other Monday or Friday at 9 PM on Canvas. To access the Assignment, go to the Quiz Tab on the left panel of your Canvas page. Please use Chrome and don't click submit until you have answered all questions.
- Most assignments are **timed** (allotted time will vary) and will close by **9 PM of Monday or Friday** of the following week (see dates below and on the schedule).
- There are a total of 5 assignments worth **12% of the final grade.**
- **5% will be given for completion and 7% will be given for accuracy.**

| Assignment | Due date |
|-------------------|--------------------------|
| Assignment 1 | Friday, April 12 by 9 PM |
| Assignment 2 | Friday, April 26 by 9 PM |
| Assignment 3 | Monday, May 6 by 9 PM |
| Assignment 4 | Friday, May 24 by 9 PM |
| Assignment 5 | Monday, June 3 by 9 PM |

4. MIDTERM EXAMS

- Each in-person midterm exam will be based on material for that section of the course up to the lecture preceding the exam.
- Each midterm is worth **25% of the final grade.**
 - Midterm 1 – Wednesday, April 24 at 7 PM – CLASS A00 - MOS 0113
 - CLASS B00 – PETER 110
 - Midterm 2 – Wednesday, May 22 at 7 PM – CLASS A00 - MOS 0113
 - CLASS B00 – PETER 110

5. FINAL EXAM

Saturday, June 8 at 8 AM

- The final exam will be cumulative and in-person.
- **30% of the final grade.**

Everyone must take the final exam; it cannot be dropped. If there is an exceptional circumstance, or you are sick, please contact me as soon as possible. We will likely schedule an oral exam.

All exams and the final exam will be held **in person outside of lecture** and will be **closed book** exams. The midterms will contain material for that section of the course up to the lecture preceding the exam. The final exam will be cumulative, covering the whole class but weighing the section of the course that has not been tested more heavily. Exam scores will be available after grading, but the exam questions will not be returned. **All questions about the content of the exams will be addressed during office hours and discussion sections.**

Please bring a **photo ID** to the exams, as we will be checking it. Students who do NOT have a photo ID will not be permitted to take the exam.

Please note that the midterms and final exam has been scheduled by the registrar and the policy is not to change the day or time of these exams.

MISSING A MIDTERM EXAM

If you miss an exam, you will need to provide documentation of an unavoidable emergency (serious illness, etc.) as soon as possible. The **following grading policy** (see below) accommodates for the eventuality of disease or any other emergency.

Regardless, if you are sick or concerned that you would endanger others by attending an in-person exam, please contact me as soon as possible to go over your options.

GRADING:

- If your final exam score is higher than **BOTH** midterms, the final exam will be worth 80% and the midterms grades will be removed.
- If one of your midterm exams (for example Midterm 1) is lower than the final exam, then the 25% of the lower midterm will be split in the following way:
 1. If your other midterm score (in this case Midterm 2) is higher than your final exam score, then 10% of the missed/low score midterm will be placed on the higher score midterm (in this case Midterm 2) to make that midterm worth 35% of your final grade. The remaining 15% (from Midterm 1 in this example) will be added to your final exam score, so that the final exam would be worth 45% of your final grade.
 2. If the other midterm score (in this example Midterm 2) is also lower than your final exam score, then both midterms are lower than the final exam and the final is worth 80% of your final grade.

IMPORTANT - Please note that UCSD's policy is that "Vaccinated students who have been exposed [to COVID-19] are allowed to attend class and move about campus masked" which includes attending in-person exams. This does not include people who have COVID symptoms or a positive test result. You can find an up-to-date policy and more details here:

<https://returntolearn.ucsd.edu/return-to-campus/exposure-contact-tracing/index.html>

GRADE SCALE

The top 5 grades in each exam will be averaged and normalized to a 100%. All other exam grades will be normalized accordingly.

The final grade will follow the table below. The final grade will be **CURVED**.

| Letter Grade | Percent grade |
|---------------------|----------------------|
| A+ | 98-100 |
| A | 92-97 |
| A- | 90-91 |
| B+ | 88-89 |
| B | 82-87 |
| B- | 80-81 |
| C+ | 78-79 |
| C | 72-77 |
| C- | 70-71 |
| D | 60-69 |
| F | <60 |

COURSE POLICIES

REGRADES

Occasionally errors, or ambiguities occur in an exam question. If you have a specific issue with a question, please email Catalina within 24 hours of completing the exam. The IAs and I will evaluate the question and we could either not change anything (if we think the question is fair) or we could remove the question from the exam for the whole class.

If you have a specific concern about how an answer to an exam question was graded email the IA who graded the question, include BILD 2 in the subject. You must do this within **one week** of the exam being graded and available for viewing. Late regrades **WILL NOT** be accepted.

Cheating Any student caught cheating will receive an F in the course and will be reported to the Academic Integrity office. For information on academic integrity at UCSD visit the following website <http://senate.ucsd.edu/manual/appendices/app2.htm>

All academic work you submit for this course should be your own new original work. Exams are closed book, and you must complete these exams without access to other resources or the person seating next to you. If we suspect you are cheating, we will remove your exam and submit your case to academic integrity.

Some assignments may be open-book, but you must explain your answers in your **own** words. Assignments are to be completed **individually**, if we see two students with the same answers your case will be sent to academic integrity.

IMPORTANT – Please do not post any class lectures, documents, problem sets, assignments, or exam questions on public websites. These materials are my intellectual property, and you must not make them public without my authorization.

STUDENTS REGISTERED WITH OSD

If you have a disability that might affect attendance or performance in the class, contact your IA or instructor as soon as possible, so that we can work with you in providing reasonable accommodations. To ensure proper support, anyone who requests accommodations due to a disability must get a current Authorization for Accommodation (AFA) letter issued by the Office for Students with Disabilities (OSD). To contact OSD, use the student portal <https://academicaffairs.ucsd.edu/sso/osdsp/home>, or email the Biology OSD liaison at bioosd@ucsd.edu, or call 858-534-4382.

HELPFUL RESOURCES AT UCSD

If you are feeling overwhelmed, experiencing anxiety, depression or other condition please let us know as soon as possible. We can support you and give you some guidance on what resources are available at UCSD to ensure you can succeed during difficult times.

| Academic Support | Psychology & Physical Safety* | Basic Needs |
|---|--|--|
| <p>OASIS (http://oasis.ucsd.edu) The Office of Academic Support & Instructional Services (OASIS) offers math and science tutorial Programs for everyone. They also have services and scholarships for those of you who have overcome significant obstacles to become successful (like being first in your families to go to college).</p> <p>Teaching + Learning Commons (http://commons.ucsd.edu) The Teaching + Learning Commons offers tutoring, consultations, and workshops on learning strategies as well as assistance with writing in the Writing + Critical Expression Hub.</p> <p>Educational Technology (https://digitalllearning.ucsd.edu/learners/learning-remotely/tools.html) EdTech has resources for understanding educational technologies like Zoom and Canvas.</p> | <p>CAPS (http://caps.ucsd.edu) CAPS offers free, confidential counseling. They can help with urgent crises, such as an assault or thoughts of self-harm. They can also talk if you are worried about a friend or classmate.</p> <p>CARE at SARC (http://care.ucsd.edu) Campus Advocacy, Resources, and Education at the Sexual Assault Resource Center (CARE at SARC) offers support for those of you who have experienced sexual violence or violence from a partner. They have free confidential counseling, including on nights and weekends.</p> | <p>Triton Food Pantry (http://basicneeds.ucsd.edu/triton-food-pantry/) The Triton Food Pantry discreetly offers food for current UCSD students to ensure each of you has enough nutrition to get through the day.</p> <p>The Hub (https://basicneeds.ucsd.edu) The Hub serves those of you who have trouble accessing basic needs, including food or stable housing, or who have financial emergencies. They can help you connect with a variety of on- and off-campus programs, including the Food Pantry, CalFresh, emergency loans, emergency housing, or changes to your financial aid.</p> |