COURSE SYLLABUS

Instructor: Dr. Catalina Reyes **E-mail:** creyesgonzalez@ucsd.edu

Office: H&SS 1145A

Office hours: Monday 9:30 – 10:30 AM

Zoom https://ucsd.zoom.us/j/96756849364

One-on-one or small group meetings are also available at selected times. To book a 30-minute meeting please email me.

ELECTRONIC COMMUNICATION

Please contact your Instructional Assistant (IA) for general inquiries. Make sure to include **BIPN 102** 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.

Course website: https://canvas.ucsd.edu/

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

IMPORTANT – Lectures, discussion sections, midterms and the final exam are **in-person**. However, all lectures and discussion sections will be podcasted. You can access these materials through Media Gallery in Canvas or at www.podcast.ucsd.edu

ACCOMMODATIONS:

If you have a special circumstance or a family or medical emergency, please contact the instructor as soon as possible, so that we can find an accommodation.

LECTURE:

Monday, Wednesday, and Friday 11 – 11:50 AM FAH 1301

The lecture schedule (see below) is subject to change. **Lecture slides** will be posted on Canvas at least 24 hours before each lecture.

TENTATIVE SCHEDULE						
Date	Topic	Silverthorne 8 th ed	Problem set			
Week 1	Syllabus and Anatomy of the respiratory system	534-539				
Jan 9-13	Pathologies					
Week 2	NO CLASS Jan 16					
Jan 16-20	Inhaling and exhaling	540-545, 547	PS1			
	Pulmonary mechanics	548-551				
Week 3	Flow and Resistance in the Respiratory system					
Jan 23-27	Ventilation	543, 546	PS1 and PS2			
	Assignment 1 DUE Friday Jan 27 - 9 AM	551-554				
Week 4	Gas exchange	563-569				
Jn 30-Feb 3	Gas exchange continuation	553-555	PS2 and PS3			
	Assignment 2 DUE Friday Feb 3 - 9 AM					
Jan 30	MIDTERM 1 – Monday 6:30-8 PM – PETER 108					
Week 5	Gas transport	567-572				
Feb 6-10	Gas transport continuation	572-577	PS3			
Week 6	Blood pathologies					
Feb 13-17	Acid-base regulation	642-647	PS4			
Week 7	NO CLASS February 20					
Feb 20-24	Regulation of ventilation	578-583	PS5			
	Exercise, high altitude, diving		155			
	Assignment 3 DUE Friday Feb 24 - 9 AM					
Feb 27	MIDTERM 2 – Monday 6:30-8 PM – PETER 108					
Week 8	Digestive system anatomy	655-659				
Feb 27-	Digestive system Motility, Cephalic and Gastric	661-664,	PS5			
Mar 3	phases	667-673	155			
Week 9	 Digestive system Intestinal phase 	673-688				
Mar 6-10	Microbiomes	0.5 000	PS6			
	Assignment 4 DUE Friday Mar 10 - 9 AM					
Week 10	Metabolism	698-722	PS6			
Mar 13-17	Guest lecture					
	Temperature Regulation					
	Assignment 5 DUE Friday Mar 17					
March 20	• Final exam – CUMULATIVE 11:30 AM					

OPTIONAL TEXTBOOK: Human Physiology, 8^{th} edition by Dee Silverthorn. The 7^{th} , 6^{th} and 5^{th} editions are fine.

IMPORTANT – the textbook is **NOT** mandatory. However, a digital inclusive version of the textbook will be provided by the UC San Diego Bookstore through the RedShelf tool on Canvas. You have a two-week period (January 21) to decide if you want to keep access or opt in. If you keep access, you will be charged \$32.94 for perpetual access to the eBook. If you have any questions concerning Inclusive Access, please contact the Bookstore at textbooks@ucsd.edu or email help@redshelf.com. For any questions about using your eBook please reference RedShelf Solve.

To OPT-IN:

- Click the RedShelf link in Canvas
- Click View Course Materials
- Select "OPT-IN to Course Materials"
- Look out for an email from <u>donotreply@redshelf.com</u> and check their spam folders if they don't receive it.

OBJECTIVES FOR THE COURSE

- 1. Learn how different systems in the human body work together to maintain homeostasis.
- 2. Learn the anatomy of the systems discussed in class.
- 3. Learn anatomical, physiological, and biomedical terms.
- 4. Learn how to read graphs and images.
- 5. Ability to apply the knowledge acquired to solve physiological and medical problems.
- 6. Develop critical thinking skills

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. There are two components important when learning physiology: memory and understanding. You will have to memorize anatomical and physiological terms, but to succeed you must **understand** the concepts and physiological processes and learn to **critically think** about physiology.
- 3. Read through the power point presentations before lectures.
- 4. Take notes while listening to the lectures.
- 5. Attend a discussion section.

DISCUSSION SECTIONS: During section, IAs will cover problem sets, you will be able to ask questions about the lecture material and important material will be reviewed.

Discussion sections will take place at the scheduled times and locations. Discussion sections are mandatory, **3% of the grade**.

You will be able to attend any discussion section **if there is space**. Please contact the IA in your registered section and the IA of the discussion section you want to attend to inquire about switching sections. IAs will approve or deny your request by week 2.

IA	Email	Section	Room	Section time
George Luo	geluo@ucsd.edu	A01	CENTR 217B	W 1-1:50 pm
Taylor Chin	tschin@ucsd.edu	A02	WLH 2114	W 3-3:50 pm
Justin Mya	jmya@ucsd.edu	A03	HSS 2321	W 7-7:50 pm
Spencer Brown	scbrown@ucsd.edu	A04	WLH 2209	TH 7-7:50 pm
Alexandra Stream	astream@ucsd.edu	A05	HSS 1128A	F 8-8:50 am
Alexandra Stream	astream@ucsd.edu	A06	HSS 1128A	F 9-9:50 am
Kyle Gallagher	ktgallag@ucsd.edu	A07	CENTR 220	F 1-1:50 pm

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 hand them in.

DISCUSSION FORUMS will be available through CANVAS for students to post questions.

EXAMS, ASSIGNMENTS AND GRADING:

Assignments:

- Assignments are short physiology exercises or questions evaluating each week's lecture materials or from assigned readings.
- There are a total of 5 assignments worth **10%** of the final grade. **5%** will be given for **completion** and **5%** will be given for **accuracy**.
- Assignments are open book. Please use your **own words** when answering the questions.
- Assignments will be posted on Monday 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.
- Assignments are **timed** (allotted time will vary) and will close by **9 AM** on the due dates indicated on the table below (assignment due dates are also shown on the schedule).
- Since you have more than 2 days to complete the assignments, we will **NOT** accept late assignments.

Assignment	Release date	Due date
Assignment 1	Monday January 23	Friday January 27 - 9 AM
Assignment 2	Monday January 30	Friday February 3 - 9 AM
Assignment 3	Monday February 20	Friday February 24 - 9 AM
Assignment 4	Monday March 6	Friday March 10 – 9 AM
Assignment 5	Monday March 13	Friday March 17 - 9 AM

CLICKERS

Active participation in lecture is important for your learning. There will be several opportunities during lectures to participate with Clickers. Participation points will be 2% points.

Clicker registration: you must register your clicker on Canvas (not the Clicker website). You cannot share the clicker with someone in the same class.

We will start counting Clicker participation for points starting on the Monday of week 2. To accommodate for clicker malfunction, lack of clicker batteries or any other circumstances, full attendance points will be given if you attend and click in **15 lectures out of 25**. This allows you to miss 2 weeks (6 lectures) of class after the first week. If you are sick, please use this dropped lectures and stay home.

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.

DISCUSSION SECTIONS

Attend 6 out of the 10 discussion sections to get 3% of the grade. If you can't attend the discussion section, please submit the problem set to your IA, before it is covered in section.

MIDTERM EXAMS

Two 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 Monday, January 30 6:30-8 PM
- Midterm 2 Monday, February 27 6:30-8 PM

Exam scores will be available after grading, but the exam answers will not be posted. All questions about the content of the exams will be addressed in office hours.

MISSING MIDTERM EXAMS

If you miss a midterm exam, you will be required to provide official documentation of an unavoidable emergency (serious illness, etc.) as soon as possible. The policy stated below (Grading) will accommodate for the eventuality of disease or any other emergency. Regardless, if you are sick or concerned that you would endanger other by attending an in-person exam, please contact me as soon as possible to go over your options.

FINAL EXAM

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

The final exam is scheduled for Monday, March 20 – 11:30 AM

- The final exam will be cumulative and in-person.
- 35% of the final grade

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

GRADING:

- If your final exam score is higher than **BOTH** midterms, the final exam will be worth 85% 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 50% 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 85% 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. However, the grade scale will be adjusted or the final grade may be **CURVED**.

Letter Grade	Percent grade
A+	98-100
A	92-97
A-	90-91
B+	88-89
В	82-87
B-	80-81
C+	78-79
С	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 questions 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 BIPN 102 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.

Assignments are 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 WITH DISABILITIES

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

technologies like Zoom and Canvas.

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