#### **COURSE SYLLABUS**

**Instructor:** Dr. Catalina Reyes **E-mail:** <a href="mailto:creyesgonzalez@ucsd.edu">creyesgonzalez@ucsd.edu</a>

Office: University Center 301 (UC301), Room 103

**Office hours:** Monday 9 - 10 AM

Zoom https://ucsd.zoom.us/j/99167510344

**One-on-one or small group meetings** are also available at selected times. To book a 30-minute meeting (Zoom or in person) please use the link below.

https://calendly.com/catalinareyes/30min

If you need a different meeting time or if the meeting periods are all taken, please email me and we will schedule a different time.

# **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 <a href="https://www.podcast.ucsd.edu">www.podcast.ucsd.edu</a>

#### **ACCOMMODATIONS:**

If you have a special circumstance or an emergency, please contact the instructor as soon as possible.

**LECTURE:** Monday, Wednesday, and Friday 12 – 12:50 AM, PETERSON 110.

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 <sup>th</sup> ed	Problem set			
Sept 24	Seating chart, Syllabus, Anatomy of the respiratory					
	system					
Week 1	Anatomy of the respiratory system	534-539				
Sept 27-	Pathologies		PS1			
Oct 1	Inhaling and exhaling	540-542				
Week 2	Inhaling and exhaling cont.	544-545, 547				
Oct 4-8	Pulmonary mechanics	548-551	PS1 and PS2			
	Flow and Resistance in the Respiratory system	543, 546				
Week 3	Assignment 1 DUE Oct 11 by 10 AM					
Oct 11-15	• Flow and Resistance in the Respiratory system cont.	543, 546	PS2 and PS3			
	Ventilation	551-554	PSZ and PSS			
	Gas exchange	563-569				
Week 4	Gas exchange continuation	553-555				
Oct 18-22	Gas transport	567-572	PS3			
	Gas transport continuation	572-577				
Week 5	Assignment 2 DUE Oct 25 by 10 AM					
Oct 25-29	Blood pathologies		PS4			
	Guest lecture		F34			
	MIDTERM 1 – FRIDAY, OCT. 29 – IN LECTURE					
Week 6	Acid-base regulation	642-647				
Nov 1-5	Regulation of ventilation	578-583	PS5			
	Exercise, high altitude, diving					
Week 7	Assignment 3 DUE Nov. 8 by 10 AM					
Nov 8-12	Digestive system anatomy	655-659	PS6			
	Digestive system Motility, Cephalic and Gastric	661-664,	130			
	phases	667-673				
Week 8	Digestive system Intestinal phase	673-688				
Nov 15-19	Microbiomes		PS6			
	MIDTERM 2 – FRIDAY, NOV. 19 – IN LECTURE					
Week 9	Assignment 4 DUE Nov. 22 by 10 AM					
Nov 22-26	Metabolism	698-722				
	Temperature Regulation					
Week 10	Guest lecture					
Nov 29-	<ul> <li>Interesting Topics (if time permits)</li> </ul>					
Dec 3	Assignment 5 DUE Dec. 3 by 10 AM					
Dec 9	• Final exam – cumulative 11:30 AM-2:30 PM					

**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 to decide if you want to keep access or opt in/opt out (**before October 9**). If you keep access, you will be charged \$29.18 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

# **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 optional but encouraged. If you attend 7 discussion sections, you will earn a **1% BONUS in the final exam**.

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	Section/OH	Room	Schedule
Carmelina Azar	A01	HSS 1315	W 6-6:50 PM
c1azar@ucsd.edu	A08	WLH 2115	W 9- 9:50 AM
Stephanie Luedtke	A06	CENTR 218	F 5-5:50
sluedtke@ucsd.edu	A07	CENTR 218	F 6-6:50
Charles Austria	A03	CENTR 218	F 2-2:50 PM
cmaustri@ucsd.edu			
Tom Quach	A02	CENTR 217B	W 5:00-5:50 PM
thquach@ucsd.edu			
Anna Hakimi	A05	CENTR 218	F 4-4:50 PM
ahakimi@ucsd.edu			
Timothy Heil	A04	CENTR 218	F 3-3:50 PM
theil@ucsd.edu			

### **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, unless you have a special circumstance and will still like to obtain the 1% bonus points.

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

### **EXAMS, ASSIGNMENTS AND GRADING:**

### **Assignments:**

- Assignments are short physiology exercises or questions from assigned readings evaluating each week's lecture materials.
- There are a total of 5 assignments worth 15% of the final grade.
- 5% will be given for completion and 10% will be given for accuracy, for a total of 15%
- Bi-weekly assignments will be posted every other **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.
- Assignments are timed (allotted time will vary) and will close by 10 AM of Monday or Friday (last assignment).
- Assignment due dates are below and, on the schedule.

Assignment	Due date
Assignment 1	Monday, October 11 by 10 AM
Assignment 2	Monday, October 25 by 10 AM
Assignment 3	Monday, November 8 by 10 AM
Assignment 4	Monday, November 22 by 10 AM
Assignment 5	Friday, December 3 by 10 AM

#### 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 Friday, October 29 in lecture
- Midterm 2 Friday, November 19 in lecture

Final exam: Thursday, December 9, 11:30 AM – 2:30 PM

- The final exam will be cumulative and in-person.
- 35% of the final grade
- No make-up Final Exam and no time or date change

There are no make-up exams, see grading below. If you miss a midterm exam, you will be required to provide official documentation of an unavoidable emergency.

## **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.

#### **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. This grade break down is not negotiable. 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

#### 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 <a href="http://senate.ucsd.edu/manual/appendices/app2.htm">http://senate.ucsd.edu/manual/appendices/app2.htm</a>

**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.