COURSE SYLLABUS

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

Office: H&SS 1145A

Office hours: Wednesday 11 AM – 12 PM

Zoom https://ucsd.zoom.us/j/92878717348

One-on-one or small group meetings are also available at selected times. To book a 30-minute meeting (Zoom or in-person) 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 and **Discussion Sections** in the first **TWO WEEKS** of Winter quarter will be hold synchronously through Zoom, at the scheduled lecture time.

Please use this Zoom link for the lectures https://ucsd.zoom.us/j/96295067340. You can also find this link on the course Canvas calendar.

Lecture and discussion sections will be held in-person from week 3-10. All lectures and discussion sections 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**. Unless remote learning is extended.

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:

Week 1 and 2: Monday, Wednesday, and Friday 10 – 10:50 AM, Zoom meeting ID: https://ucsd.zoom.us/j/96295067340

Week 3-10: Monday, Wednesday, and Friday 10 – 10:50 AM, PCYNH 106

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 Jan 3-7	 Syllabus and Anatomy of the respiratory system Pathologies Inhaling and exhaling 	534-539 540-545, 547	PS1				
Week 2 Jan 10-14	 Pulmonary mechanics Flow and Resistance in the Respiratory system Ventilation 	548-551 543, 546 551-554	PS1 and PS2				
Week 3 Jan 17-21	NO CLASS January 17 Assignment 1 DUE Wed. Jan 19 by 10 AM Gas exchange Gas exchange continuation	563-569 553-555	PS2 and PS3				
Week 4 Jan 24-28	 Gas transport Gas transport continuation EXAM 1 – Friday January 28 - Lecture 	567-572 572-577	PS3				
Week 5 Jan 31-Feb 4	 Assignment 2 DUE Mon. Jan 31 by 10 AM Blood pathologies Guest lecture Acid-base regulation 	642-647	PS4				
Week 6 Feb 7-11	 Acid-base regulation cont. Regulation of ventilation EXAM 2 – Friday February 11 - Lecture 	642-647 578-583	PS5				
Week 7 Feb14-18	 Assignment 3 DUE Mon. Feb. 14 by 10 AM Exercise, high altitude, diving Digestive system anatomy 	655-659	PS5				
Week 8 Feb 21-25	 NO CLASS Feb 21 Digestive system Motility, Cephalic and Gastric phases EXAM 3 – Friday February 25 - Lecture 	661-664, 667-673	PS6				
Week 9 Feb 28- Mar4	 Assignment 4 DUE Mon. Feb. 28 by 10 AM Digestive system Intestinal phase Microbiomes 	673-688	PS6				
Week 10 Mar 7-11 Mar 18	 Metabolism Guest lecture Temperature Regulation Assignment 5 DUE Friday March 11 Final exam – cumulative Friday 8-11 AM 	698-722					

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 (**before January 15**). 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. 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 on Zoom for the first two weeks of the winter quarter. Discussions sections will take place at the scheduled times and locations during weeks 3-10. Discussion sections are worth 4% of your grade. If you attend 5 discussion sections, you will get full points.

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
Zachary Miranda	A01	APM 2301	M 1-1:50 PM
zmiranda@ucsd.edu	AUI	ATWI 2501	WI I 1.30 I W
Betty Huynh	A02	SOLIS 110	W 2- 2:50 PM
bhuynh@ucsd.edu	AUZ	3013 110	VV Z Z.30 T IVI
Rasika Patkar	A03	CENTR 220	W 9-9:50 AM
rpatkar@ucsd.edu	A04	HSS 2321	W 2-2:50 PM
Harjot Dhaliwal	A05	CENTR 220	F 3-3:50 PM
hsdhaliw@ucsd.edu	7.03	CLIVIII 220	1 3 3.33 1 111
Charles Austria	A06	CENTR 220	F 4:00-4:50 PM
cmaustri@ucsd.edu	AUU	CLIVIII 220	1 4.00 4.30 FW

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 4% grade.

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 20% of the final grade. 5% will be given for **completion** and **15%** will be given for **accuracy**.
- Assignments are open book. Please use your **own words** when answering the questions.
- 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**, **Wednesday**, **or Friday** (last assignment).
- Assignment due dates are below and, on the schedule. Since you have more than 2 days to complete the assignments, we will **not** accept late assignments.

Assignment	Due date
Assignment 1	Wednesday, January 19 by 10 AM
Assignment 2	Monday, January 31 by 10 AM
Assignment 3	Monday, February 14 by 10 AM
Assignment 4	Monday, February 28 by 10 AM
Assignment 5	Friday, March 11 by 10 AM

ICLICKERS

Active participation in lecture is important for your learning. There will be several opportunities during lectures to participate with iClickers. Participation points will be 4% of your grade

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

We will start counting iClicker 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 13 lectures out of 22. This allows you to miss 3 weeks (9 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.

PROFESSIONALISM

This grade is to motivate you to consider the consequences of your actions when interacting with peers, IAs or the instructor. Unprofessional interactions consume time and affect the dynamics of a class. We assume that everyone is professional, so you are awarded with these points at the beginning of the quarter. During the quarter IAs and/or instructor will observe the way you interact and communicate with the teaching team and peers. These includes one-on-one interactions, electronic communication, follow-up conversations on grades and regrades. Your awarded points (2%) may be deducted if we see unprofessional behavior.

EXAMS

Three 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 20% of the final grade. The LOWEST midterm grade will be dropped.
- Exam 1 Friday, January 28
- Exam 2 Friday, February 11
- Exam 3 Friday, February 25

Final exam: Friday, March 18, 8 - 11 AM

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

All exams will be held in person during lecture and will be closed book. The exam format may change if extraneous circumstances push us to extend remote learning beyond the first two weeks of the quarter. If this is the case, we will notify you of the changes ahead of time.

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 weighting 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 in office hours.

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.

Missing 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 policy of dropping one of the three midterm exams will accommodate 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.

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.

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

iClicker	4%
Professionalism	2%
Assignments	Completion 5%, accuracy 15%
Highest Exam grade	20%
Next highest Exam grade	20%
Lowest exam grade	0%
Final exam	30%
Discussion sections	4%
BONUS CAPES	1% in the final grade, if 90% response rate

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

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