

College of San Mateo
BIO 260: HUMAN PHYSIOLOGY Spring 2021

WELCOME!

I'm so excited to beginning this journey into physiology with you. We are going to build on your existing knowledge of the human body to explore the functions of the organs and systems of the human body. The goal is for you to develop the knowledge and understanding required to launch you into programs in nursing, medicine, physical therapy, kinesiology, psychology and other related fields. We will be meeting synchronously, as well as doing much of the work online because of the pandemic. I am committed to making this course as supportive as possible. Please feel free to contact me at any time through the Canvas Inbox or my email.

CATALOG COURSE DESCRIPTION

Functions of the organs and systems of the human body. (Intended for students of nursing, physiotherapy, physical education/kinesiology, psychology and related fields. Elective for pre-dental, pre-medical, and pre-veterinary students.) Extra supplies may be required. A materials fee in the amount shown in the Schedule of Classes is payable upon registration.

STUDENT LEARNING OUTCOMES:

1. Describe the interactive functions of key homeostatic mechanisms.
2. Describe cellular activity using chemical and physical principles.
3. Relate cellular activity to the functioning of specific body tissues and organs.
4. Distinguish between normal physiological changes and common pathological changes in the body.
5. Use quantitative information to evaluate and understand physiological processes.

INSTRUCTOR: Theresa Martin Phone: (650) 574-6252

I will be sending you announcements through our Canvas system, and you can reach out to me any time you have a question or concern. In Canvas there is a Canvas Inbox where you can send me a message. You can also email me at martin@smccd.edu (Please use "Biol 260" in the subject line of your email so I know the email is coming from our class). I will be online Monday through Friday for this class, and I will respond to email during business hours. My ability to respond on weekends is limited. Please allow up to 48 hours for a response. If you don't get a response by then please resend your message. With so many emails coming in, yours could get lost in the mix.

Zoom Office Hours (<https://smccd.zoom.us/j/8430188701>): Tuesdays 11am and 5pm.

TEXTBOOKS and other RESOURCES:

1. Marieb and Hoen, *Human Anatomy and Physiology*. Pearson Publishers, 11th edition. In the Inclusive Access package and already on Canvas.
2. Marieb and Smith, *Human Anatomy & Physiology Laboratory Manual*, Main Version Plus Mastering A&P. In the Inclusive Access package and already on Canvas.
3. Physiology Lab Kit: \$5 from the CSM bookstore. Once you order online you will be notified via your my.smccd email when you can come pick it up.

EXAMINATIONS and GRADES:

3 Midterms-----	100pts @	A = 90+%
Case study -----	50pts	B = 80-89%
Lab reports and assignments-----	~350pts	C= 70-79%
Final exam-----	200pts	D= 60-69%
		F = <60%

CLASS POLICIES:

1. Attendance

Attendance at the synchronous Zoom meetings is optional. The meetings will be recorded. However, there are group activities during the synchronous meetings that will be extremely valuable for understanding the content of the course and you are highly encouraged to attend. For labs you will send data, photos and/or videos to verify the work you did. Late work will be accepted until the unit has ended, but may incur a 20% penalty. Make-up work must be arranged in advance, and make up exams may be different from the original. When you cite a source, the citation should use [APA style](#) (CSM library has references on this format).

2. Class Conduct:

Dishonesty such as cheating, plagiarism, or knowingly furnishing false information to the College and its officials is prohibited and may lead to appropriate disciplinary action. All work submitted must be your own and on time, no points will be awarded for late or [plagiarized](#) work.

[Netiquette](#) All public online discussions in this class must have appropriate etiquette. Some highlights include:

- Use respectful and appropriate language.
- Read all messages. You are responsible for reading all of the messages that are posted in the online discussion.
- Respond to each other. The grades for the discussions are based on you making one original post and also responding to at least one other person in your group. This is a science class so discussions of beliefs that are not scientifically based will not be a part of any discussion.
- Realize that discussions are public. In an online discussion, you can expect that everyone in the class will read your messages.
- Use email to send a private message. If you want to send a private message to someone, click on the person's name and use the email function. Otherwise, all messages are considered public.
- Use a person's name when you reply to a message. It helps to keep all of us oriented. It helps us maintain a clearer sense of who is speaking and who is being spoken to. As we begin to associate names with tone and ideas, we come to know each other better.

3. Accessibility

If you have a documented disability and need accommodations for this class, please contact me or the Disability Resource Center (DRC) for assistance at the beginning of the term. The DRC is

located in Bldg. 10 Room 120. (650) 574-6438; TTY (650) 574-6230. Confidentiality- Students with disabilities are protected under Family Education Rights and Privacy Act (FERPA).

4. Title IX

The San Mateo County Community College District is committed to maintaining safe and caring college environments at Cañada College, College of San Mateo and Skyline College. The District has established policies and procedures regarding Sexual Misconduct, Harassment, and Assault. A District website has also been developed which provides you with important information about sexual misconduct and sexual assault. <http://smccd.edu/titleix/>

To learn more about these issues and how you can help prevent them, you are encouraged to view the Not Anymore videos, which can be found on WebSMART under the Student Services link. Click on [Not Anymore Video](#)

5. Educational Equity

My commitment to equity: *You are entitled to an equitable learning environment that fair. Our class will be open to all voices, it will foster your agency, and it will support your learning endeavors.*

If you feel you are in an environment that is not conducive to your learning or you want to learn more about educational equity, please come talk to me. You may also contact CSM's Director of Equity (collegeofsanmateo.edu/equity) to explore your options.

TENTATIVE SCHEDULE - PHYSIOLOGY Spring 2021

WEEK and DATES	LECTURE TOPIC	LABORATORY EXERCISES - in the lab manual or Mastering unless otherwise specified, all handouts (HO) can be downloaded from Canvas
1: January 18	Course Intro, Homeostasis	1. Mastering introduction; Quantitative skills and cell review assignment
2: January 25	Cell chemistry including acids and bases Cell membrane: transport and other functions	1. Homeostasis Lab (HO) 2. Fluid and Electrolyte Balance Assignment in Mastering (HO)
3: February 1	Enzymes and Metabolism, Hormonal Control, Nutrition	1. The Cell: Transport Mechanisms and Permeability 2. Fluids and Electrolytes Case Study (HO), Fluids and Electrolytes Mastering assignment
4: February 8 *President's Day Weekend	Gene Function and Regulation	1. Principles of Heredity Lab 2. Practice Exam 1
5: February 15 *President's Day Weekend	Exam I on Cell Biology The Nerve Impulse	1. Nervous system labs, Fluids and Electrolytes Case presentation 2. Nervous System Mastering assignment

6: February 22	The Synapse and Nervous Integration	1. Nervous system labs cont., Brain Tumor Case (HO) 2. Brain tumor Case (HO) and Mastering assignment
7: March 1	Endocrine System	1. Vitamin D Case (HO), finish NS labs 2. PhysioEx Lab: Endocrine System, practice exam
8: March 8	Muscle Cell Structure and Function	1. Brain Tumor Case presentation; Muscle modelling & grip strength testing lab 2. Practice Exam 2
9: March 15	Exam II: Nerves, Endo & Muscle Blood	1. Vitamin D case presentation; Blood lab - Part 1 2. Reading – The Wonders of Blood, blood Mastering assignment
10: March 22	Blood Heart: Functional Anatomy, Cardiac Cycle	1. Human Cardiovascular Physiology, Parkinson's case study 2. PhysioEx Lab: Cardiovascular Physiology
March 29*	Spring Break!	
11: April 5	Electrical System, Cardiac Output, Vessels, Blood Flow and BP	1. Electrocardiogram using Vernier (HO), Cardio Case Study (HO) 2. Cardiovascular Case Study, CV Mastering assignment
12: April 12	Leukocytes/ Immunity	1. Parkinson's Case Presentation 2. Immune system Mastering assignment
13: April 19 April 22* Teacher Work Day	Immune System	1. Cardiovascular Case Study presentation, Leukocyte Lab (Blood Lab Part 2) 2. Practice exam 3
14: April 26	Midterm III on Circulation Respiratory System Mechanics	1. Respiratory System Lab 2. Respiratory system Mastering assignment
15: May 3	Gas Exchange and Transport	1. Diabetes Case Study 2. Respiratory system Mastering assignment
16: May 10	Renal Physiology	1. Urinalysis Lab 2. Renal System Physiology Mastering Assignment
17: May 17	Renal Physio cont.	1. Diabetes Case Study presentation 2. Practice exam 4
18: May 24 Finals Week	Finals Week	Cumulative Final