

Introduction to Human Physiology (PHYSIOLOGY 58)

Fall 2021 Syllabus and Course Outline
Sections 1060 and 1459
Santa Rosa Junior College

Contact Information

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Virtual Drop-In Hours: M, T, W, Th 5:45 PM – 7:00 PM

Zoom channel: <https://cccconfer.zoom.us/j/94989611552>

Course Description

This is an introductory course in human physiology, organized around body systems and the theme of homeostasis. The course is designed for the beginning student preparing for these health-related fields: vocational nursing, radiologic technology; or those with a general interest in the function of the human body. This course will minimize bio-chemical and quantitative details taught in a general physiology course (e.g., PHYSIO 1), focusing on the fundamental concepts of physiology. (Not intended for nursing (RN), dental hygiene, or physical therapy majors.)

Course Objectives

Upon completion of this course students will be able to:

1. Define homeostasis and explain how feedback mechanisms function to maintain homeostasis.
2. Describe the function of the organ systems of the body, including the nervous, endocrine, muscular, circulatory, respiratory, digestive, urinary, immune, reproductive systems.
3. Identify the roles of the nervous and endocrine systems in regulation of other organ systems.
4. Compare and contrast the basic mechanisms by which organ systems of the body maintain homeostasis.
5. Explain how the structure and function of cells support the function of organ systems.
6. Conduct simple physiological experiments using standard laboratory equipment.

Student Learning Outcomes

Upon completion of the course, students will be able to:

1. Describe the functions of the organ systems of the body and how each organ system contributes to control of homeostasis.
2. Describe the physiological basis for a number of major diseases and disorders of the human body.

Textbook

We will be using [Anatomy and Physiology from OpenStax](#) (ISBN: 1938168135). The textbook for this class is available for free online or you can purchase a print version in the campus bookstore or online. I cover everything you need to know in my lecture notes, so please think of the textbook as an alternate resource for information.

For lab, you will have to purchase the Physiology 58 Lab Manual available at the bookstore.

Recommended Hardware

Ideally, you should have access to a laptop or desktop computer to complete this course. However, I have taken care to design a course that can also be completed from a smartphone. Please know that writing discussion posts for this class will be difficult and time consuming without a proper keyboard - it can be done but isn't ideal. If you intend to complete this course on a phone, please let me know if there are any problems that arise. Your feedback will help me improve our learning environment to support more students.

Required/Recommended Software

- **Canvas:** This is the college's online course management system. You can access Canvas through <https://canvas.santarosa.edu/login/canvas> . Please log in at least once per day so you don't miss any important information.
- **Canvas Student App:** I strongly recommend that you download the free [Canvas Student App](#) before the course starts so you can stay more connected with our course. When prompted to find your school, enter SRJC and then select our course from your Dashboard.
- **Compatible Web Browser:** Please note that images may not load when accessing Canvas through Safari on iOS. If you are using an iPhone, iPad, or MacBook, please switch to [Google Chrome](#), [Mozilla Firefox](#), or the Canvas Student app (available on [iOS](#) and [Android](#)).
- **PDF Reader:** Some material in this course may be presented in PDFs. To view these materials, you will need a PDF reader like [Adobe Reader DC](#) (free version for Windows) or an equivalent program such as Preview on a Mac.
- **Word Processing Application:** This is not required, but you may benefit from typing your discussion posts in a word processing application as it will make checking spelling and

grammar easier. There are numerous options available, including [Microsoft Office 365](#) (free for students) and [Google Docs](#) (free).

Academic Accommodations

Students with disabilities, who may need accommodations in this class, are encouraged to contact the [Disability Resources Department \(DRD\)](#) as soon as possible to ensure that such accommodations are implemented in a timely manner. Authorization, based on verification of disability, is required before any accommodation can be provided. The DRD can be contacted at 707-527-4278 or at disabilityinfo@santarosa.edu.

Instructor Communication

My goal as your instructor is to help you succeed. I encourage you to reach out if you have questions about the material covered in class, want to discuss career options, or need help with academic and/or personal issues. To contact me, please use [Canvas Inbox](#) or e-mail me directly at mflores@santarosa.edu. I will do my best to get to your message within 24 hours but it may take me a bit longer to respond on weekends. If you prefer to meet with me on Zoom, please message me with a few time options that you are available. Once we find a time that works for both of us, we can meet via Zoom.

Important Dates

- The last day to drop without a W and receive a refund is Sunday, August 29th, 2021.
- The last day to drop without a W is Sunday, September 5th, 2021.
- The last day to drop with a W is Sunday, November 14th, 2021.

Announcements

Announcements is where I will post course updates, interesting articles and videos that relate to course topics, and checklists. To access [course announcements](#), click "Announcements" on the left navigation bar. Make sure to check for new announcements each time you sign-in to Canvas.

Modules

Modules contain all the material you need for lecture and lab. To access [course modules](#), click "Modules" on the left navigation bar. The modules in this course are organized as follows:

- **Course Orientation.** This is your guide to how the course is organized, how you can communicate with me, how to study for lecture and lab, and the resources that are available to you as a Ventura College student. Please make sure to read through the Course Orientation module before moving on to the other material in the course.

- **Lecture Units.** Each unit contains lecture notes, a link to the recorded lectures, review quizzes (optional), a practice exam (optional), and the graded assignments (lecture homework, discussion, and unit exam). The lecture notes highlight important structures and serve as a study guide for graded assignments. I recommend printing out the lecture notes so you can follow along as you watch the recorded lectures. The review quizzes and practice exam are provided to help you prepare you for the graded assignments.
- **Labs.** Each lab module contains a structures to identify list, an etymology list, a photographic atlas, interactive learning activities, lab videos, a practice quiz/exam, and a graded quiz/exam. As you work through each module, you will be given opportunities to practice your identifications to make sure you understand the material. Practice quizzes and exams are provided to help you prepare you for the graded assignments (they pull questions from the same test bank as the graded quizzes and exams).

Grades

To see your current grade in the course, please click [Grades](#) on the left navigation bar. My grading philosophy is simple. I want you to do well and that means you need to know what to expect.

- All assignments are listed so you know what tasks you have to accomplish. There are no hidden points or pop quizzes.
- Every assignment comes with clear instructions and a rubric (when appropriate). If something isn't clear or if you have a question about an assignment, please reach out to me.
- Practice quizzes and exams have been provided to help you improve your performance. These practice opportunities are a great way to build your knowledge, confidence, and success.
- Decide what grade you want and work towards earning it. If you haven't yet performed as you'd hoped, please reach out to me. I am happy to share ideas and get you set up with the resources you need to be successful in my class.
- Please make sure to review your scores regularly to make sure that I have received your work. If you have a question about a grade, feel free to send me a Canvas message or email me.

Grading Scale

Lecture (750 points) will be combined with lab (250 points) to form your overall grade. Letter grades are assigned based on the total number of points earned in the course.

<u>Letter Grade</u>	<u>Percentage</u>	<u>Points</u>
A	100 - 90%	1,000 – 900 points
B	89.9 - 80%	899 – 800 points
C	79.9 - 70%	799 – 700 points
D	69.9 - 60%	699 – 600 points
F	<60%	less than 600 points

Graded Assignments

Graded assignments are found at the end of each lecture and lab module. When you are ready, click on the title of the assignment that you'd like to take. This will pull up the instructions page. Please make sure to read the full set of instructions before clicking the "Take the Quiz" button. For discussions, please click on the title and read the instructions before posting. Below are the point values for the graded assignments in this course:

Five Lecture Unit Exams	100 points each	= 500 points
10 Lecture Homework	20 points each	= 200 points
Two Lecture Discussions	15 points each	= 30 points
Two Student/Instructor Survey	10 points	= 20 points
Two Lab Exams	50 points each	= 100 points
10 Lab Quizzes	10 points each	= 90 points *
12 Lab Assessments	5 points each	= 60 points
Total Points in the Course		= 1,000 points

* The lowest quiz score is dropped automatically.

Lecture Unit Exams

Lecture unit exams cover the material as outlined on the Course Schedule. Lecture exams are timed, feature multiple-choice questions, and may be completed once. Please see the Course Summary at the bottom of the syllabus for lecture unit exam due dates.

Lecture Homework

Lecture homework assignments are not timed, feature multiple-choice questions, and may be completed as many times as you like. Canvas will keep your highest score for grading purposes.

Lecture Discussions

Discussions are your opportunity to get to know and work with other students in the class. I will largely refrain from direct participation in our discussion so that you may share that space with your fellow students, but I will provide feedback to your discussion posts in the form of written comments. The following guidelines will help ensure that you receive full credit for your discussions:

- A minimum of two posts is required for most discussions. Your initial post should answer one of the questions in the discussion prompt. Your second post should be a response to another student in the Discussion. Please remember that I care about the quality of your ideas, not your grammar or punctuation.
- While it's nice to give brief feedback like "thanks" and "good idea", we want to make sure our responses are providing valuable feedback. Try to make a new point, provide a new piece of evidence, or ask an insightful question. Questions and experiences are just as meaningful and valuable as posts that offer up one's knowledge!
- Treat others as you would like others to treat you. Remember, being able to work with others is an important skill for any future healthcare provider!
- I recommend composing your comments in a document and then copying and pasting it into the dialogue box on Canvas. This will prevent you from losing your work if you drop your internet connection or get kicked off the website.

Lab Exams

Lab exams are not cumulative; each exam covers the material as outlined on the Course Schedule. Lab exams are timed, feature fill-in identification questions, and may be completed once. Each question on the lab exam contains a photo and a space to type in your answer. Please see the Course Summary at the bottom of the syllabus for exam due dates.

Lab Quizzes

Lab quizzes are not cumulative; each quiz covers the material as outlined on the Course Schedule. Lab quizzes are timed, feature fill-in identification questions, and may be completed up to three times. Canvas will keep your highest score for grading purposes. Each question on the lab exam contains a photo and a space to type in your answer. Please see the Course Summary at the bottom of the syllabus for lab quiz due dates.

Course Expectations

The purpose of this course is to help you develop the knowledge and skills that you will need as a future healthcare professional. I hope that when you finish this class, I've made you think about something you hadn't thought of before, that you've learned something valuable, and that you had a good time doing it. I've developed the following guidelines to create a comfortable and productive learning environment for us this semester

Spelling

The purpose of anatomical terminology is to create a standardized language for medical professionals. This language allows medical staff to communicate more efficiently and helps prevent costly errors and patient injuries. Correct identifications that contain minor spelling errors will receive half credit. Incorrect identifications or identifications with major spelling errors will not receive credit. I will determine what constitutes a minor versus major spelling error.

Late Work/Due Dates

Our assignments will have due dates. Due dates exist to keep us on track and to ensure that work doesn't pile up at the end of the semester. More importantly, developing the ability to complete tasks on time is an important skill for future healthcare professional to develop. Whether it is ensuring continuity of care at shift change or delivering medications on time, quality care and patient safety depends on our ability to organize and prioritize patient care activities in a timely manner. The following guidelines have been adopted for this course:

- I highly encourage you to work a little ahead of schedule to give yourself some breathing room. Planning out your schedule at the start of the semester is a great way to stay on top of your coursework.
- I know that sometimes things happen that are out of your control. If you identify a challenge meeting a due date, please reach out to me as soon as possible. I am willing to work with you, but I can only do that if you let me know you need help.
- I will provide a printable schedule to help you stay on track. You can also see the course due date by scrolling down to the Course Summary at the bottom of the syllabus.

Extra Credit Policy

I am not able to offer extra credit to individual students as it is not fair the rest of the class. The best way to raise your grade is to take advantage of the unlimited attempts on lecture homework.

Class Participation / Drop Policy

While I do not wish to drop students, I must do so if you do not participate. If you are having trouble keeping up, please contact me so we can figure out how to make you successful. The following is my official attendance and drop policy:

- Students who do not complete the Student/Instructor to Know You Survey by the due date will be dropped.
- Students missing two or more exams will be dropped with a W.
- If you identify a challenge meeting a due date or if you fall behind, please contact me right away. I am willing to work with you to develop a plan to catch up. If you remain in the class, but stop participating, you will receive the grade you earn.
- I will post checklists and end-of-week reminders on Canvas to help you stay on track. Please make sure to check your student e-mail, Canvas messages, and the Announcements tab each time you log on to Canvas.

Excused Absences

An absence is excused when the student has notified the instructor prior to the absence and experiences one of the following circumstances:

- illness of self or immediate family (original health care provider's excuse with signature)
- personal emergency (e.g. car accident, death in immediate family, arrest)
- service or religious obligation (e.g. military training duties, jury duty, court subpoena)
- participation in a university-approved activity (e.g. athletic event)

Changes to the Syllabus

Please note that I may need to modify the syllabus and/or course outline during the semester. Changes to the syllabus and/or course outline will be posted to Announcements on Canvas and sent to all students.

Disasters

A disaster is any natural or man-made event which has seriously impaired or halted the normal operations of the College. While it can be unpleasant to plan for a disaster, it is an important part of being a professional. In the event of a disaster, I may waive scheduled assignments, offer alternative assignments, and/or elect to use a more lenient grading scale. Please make sure to check your student e-mail, Canvas messages, and the Announcements tab for updates.

Waitlist Policy

While I wish I could teach every student who wants into my class, this course does have a limited number of seats. Due to the high-interaction requirements for lab, I will not be able to exceed the current seat limit of 24 students. The following is my official waitlist policy:

- Waitlisted students have priority for any open seats. If a seat becomes available, students on the waitlist will be registered into the class in priority order until the seat limit is reached. I do not have the ability to skip over any waitlist students.
- Waitlisted students will have access to Canvas for the first few days of the semester. Waitlisted students who are unable to get a seat in the class will be dropped from the course.
- Please be aware that fees will be assessed whenever you move from the waitlist into the class and must be paid immediately.

Plagiarism & Academic Dishonesty

Honesty is at the center of our educational partnership. I do my best to ensure that what I teach is supported by evidence and represents the best version of current science I can present within the time constraints of our course and with respect for its status as an introductory course. What I ask in return is that you engage in the course honestly, doing your own work, asking for help when needed, and sharing your understanding in your own words in our discussions.

Plagiarize is defined by the Merriam-Webster dictionary as: "to steal and pass off the ideas or words of another as one's own without crediting the source". As we proceed through this course, I ask you engage in our Discussions with your own words and to cite the sources you use. I make this request for two reasons: 1) I want you to understand the material, and 2) I want to help you develop the knowledge and skills you will need in your future classes and career. I cannot do that if you use someone else's words as your own. This course will follow the [SRJC Academic Integrity Policies](#). It is my sincere hope that we engage in education honestly and do not need to address any cases of academic dishonesty in this class. Remember, you will be expected to know this material in your future classes and on the entrance and licensing exams for most healthcare professions. You and your future patients will benefit if you invest in learning the material now.

Student Privacy

Students are guaranteed the right to privacy of their educational records by the [Federal Education Rights and Privacy Act](#) (FERPA). Any student materials that have been retained by the instructor will be destroyed seven (7) days following official submission of final scores at the end of the semester.

Academic and Personal Counseling

It is common for college students to experience challenges that may interfere with academic success such as stress, sleep problems, juggling responsibilities, life events, relationship concerns, or feelings of anxiety, hopelessness, or depression. If you or a friend is struggling, I strongly encourage you to seek support. Helpful, effective resources are available on campus at no additional cost.

- If you are struggling academically with this class, please [meet with me on Zoom](#) or e-mail me directly at mflores@santarosa.edu .
- [Online counseling](#) is available if you are struggling academically in multiple classes or if you want to learn more about the academic resources that are available at Ventura College.
- Please visit the [Student Health Center](#) for information about the free and confidential mental health services that are available to students.

PHYSIO 58 Lecture and Lab Schedule Fall 2021

Week	Lecture	Tuesday Lab	Thursday Lab
1	Lecture #1: Introduction/Homeostasis Lecture #2: Chem of Life	Lab #1 & #2: Hierarchy/Homeostasis	Lab #1 & #2: Hierarchy/Homeostasis
2	Lecture #3: Molecules of Life	Lab #4: Enzymes*	Lab #4: Enzymes*
3	Lecture #4: The Cell	Lab #3: Osmosis*	Lab #3: Osmosis*
4	Exam I	Lecture #5: Nervous System*	Lecture #5: Nervous System*
5	Lecture #6: Nervous System and Senses	Lecture #7: Endocrine System	Lecture #7: Endocrine System
6	Exam II	Lab #5: Reflex Arc	Lab #5: Reflex Arc
7	Lecture #8: Muscular System	Lab #6: Senses*	Lab #6: Senses*
8	Lecture #9: Cardiovascular System	Lab #7: Muscle Contraction*	Lab #7: Muscle Contraction*
9	Lab Exam #1	Lab Exam #1 /Review	Lab #8 & #9: Cardiac Function & Blood Pressure
10	Exam III	Lab #8 & #9: Cardiac Function & Blood Pressure	Lab #10: Pulmonary Function*
11	Lecture #10: Respiratory System	Lab #10: Pulmonary Function*	Lab #11: Renal Function*
12	Lecture #11: Urinary System	Lab #11: Renal Function*	Lab #12 & #14: Glucose Tol. & Acid Base*
13	Exam IV	Lab #12 & #14: Glucose Tol. & Acid Base*	No Class (Veteran's Day)
14	Lecture #12: Digestive System	Lab #13: Digestion*	Lab #13: Digestion*
15	Lecture #13: Immune System	Catch up/No Class (Thanksgiving Break)	Catch up/No Class (Thanksgiving Break)
16	Lecture #14: Reproductive Systems	Lab 15: Blood*	Lab 15: Blood*
17	Review/Catch up	Lab Exam #2	Lab Exam #2
18	Exam V Thursday, Dec. 16, 10 AM to 12:45 PM	No Lab on Finals Week	No Lab on Finals Week

*Quizzes covering the previous lab will be given on the days labeled with an asterisk. End of lab assessments will be given at the end of every lab.