CR COLLEGE OF THE REDWOODS

Syllabus for Biology 7

Course Information

- Semester and Year: Fall 2025
- Course ID and Section number: BIOL-7-0928
- Instructor's name: Jamie Jackson
- Day and time of required meetings: Online
- Number of proctored exams: 0
- Course units: 4.0

Instructor Contact Information

- Office location or Online: Canvas Course Link
- Office hours: By Appointment
- Phone number: 626-768-8344 (Emergency Only: Please Text)
- Email address: jamie-jackson@redwwods.edu
- Communication notes: **I will make every effort to respond to student inquiries within 24 Hours**

Required Text and Materials

A textbook is required for this class. You may choose the **hard copy** or the **e-text**. You do NOT need both. But please look at all the required materials before making your decision. The Silverthorn text can be bundled with the required lab software, PhysioEx. There are many ways to purchase the required materials. Choose the one that seems best for you.

Human Physiology: An Integrated Approach, 8th edition by Dee Unglaub Silverthorn. This is a phenomenal physiology text. The images are excellent, the explanations are clear, and the content is excellent. You can review the various purchase options below.

RECOMMENDED: Purchase directly from Pearson. Before making purchase decisions, you may want to check out the PhysioEx requirements, because there are some text/ PhysioEx packages available directly from Pearson:

Silverthorn 8th EditionLinks to an external site. Links to an external site.

1. e-text only ($8.49 per month)
2. e-text + Modified Mastering (this comprehensive A&P study tool also includes **PhysioEx**, which we will be using for labs. ($114.99 one time)

PhysioEx™ 10.0 Laboratory Simulations in Physiology will be the backbone of our lab activities in this online class. There are several ways you can purchase this resource. You can do the Mastering bundle (see option 2 above) or rent the book for 9.99 a month and pay once $34.99 for the lab access.

Visit https://register.pearsoncmg.com/reg/buy/buy1.jsp?productID=741511Links to an external site.Links to an external site. and pay $34.99 for virtual access to the product.

Pearson's Mastering A&P Class Access Code
To register for your Online Pearson Platform and access your E-text and PhysioEx tools you'll need my course access code **jackson62748**

Register for our Online Pearson Platform called Human Physiology Fall 2025:

1. Go to https://mlm.pearson.com/enrollment/jackson62748.Links to an external site.
2. Sign in with your Pearson student account or create your account.
3. Select any available access option, if asked.
    - Enter a prepaid access code that came with your textbook or from the bookstore.
    - Buy instant access using a credit card or PayPal.
    - Select Get temporary access without payment for 14 days.
4. Select Go to my course.
5. Select Human Physiology Fall 2025 from My Courses.

If you contact Pearson Support, give them the course ID: jackson62748

Catalog Description

An organ system approach to the study of human physiology. Special emphasis is given to molecular and cellular mechanisms responsible for homeostasis. Labs include experiments on human subjects as well as computerized simulations of complex physiological processes.
Note: This course is required for application to the CR nursing program

Course Student Learning Outcomes

Upon completion of this course, you will be able to:

- Illustrate how the integration and regulation of organ systems affects the maintenance of homeostasis in the human body.
- Relate the key functions of major organ systems with the cellular and molecular mechanisms that enable these functions.
- Analyze examples of disease processes and relate them to aberrations of normal physiological function.
- Utilize the process of science to design and carry out physiological experiments, analyze resulting data, and relate results to physiological principles.

Course Calendar

Course delivery:

Please note that this course will be taught in an online format. There will be no classroom meetings. You will be required to log into Canvas on a regular basis to complete assignments, readings, participate in discussions, and take quizzes and exams. Please make sure you are comfortable with online learning and that this is the right class for you.

School starts August 23rd (a Saturday). The course Introduction Module-titled "Get Started Here" will be available to you Monday, August 18th. Your first assignments are DUE August 23rd. Please note you will only have access to the first part of the Introduction Module August 18th until the official start date of the class, August 23rd.

I will communicate through Canvas, so it is important that you log on daily. I will hold office hours each week by appointment only.

Course Schedule Link

Evaluation and Grading Policy

Grades

The purpose of grading is to get an idea of how well you are mastering the material in this course. They help you pinpoint troublesome topics that might trip you up in future courses. There are a billion grades in the gradebook, which means you have a billion opportunities to earn points and improve your grade. Everything in the gradebook is driven by your performance on the assessments in the course... and nothing else. In other words, it doesn't matter how much I love you... the grades you EARN on assignments will translate into the grade you EARN in the class. (But I do love you.)

I will use the following scale to determine the letter grade you earn in my class.			
100.0 - 93.00% = A	89.99 - 87.00% = B+	79.99 - 77.00% = C+	69.99 - 60.00% = D
92.99 – 90.0% = A-	86.99 - 83.00% = B	76.99 - 70.00% = C	< 59.99% = F
	82.99 - 80.00% = B-		

I do NOT bump grades higher than the exact percentage you earn. This means that there is no rounding up. Since grade- boundaries are by definition arbitrary, there is no good rationale for letting the boundaries slide; there will always be a cut-off and there will always be someone who is close, but not quite there. Be grateful for the BILLION opportunities you have to earn points as outlined in this syllabus. The grade reported in Canvas is the grade you will earn in the course.

Assessment

Your performance in the course will be assessed based on your execution of the following requirements. (NOTE: I do not accept late work at any time. My life is just too crazy to handle your late stuff. it will get lost. That said. if you turn something in before I get around to grading everything, then chances are excellent that I will actually accept it. So even if it is late, consider completing the assignments anyway. I'm a busy chica. you might just get lucky!)

Course activities (assignments)
The following activities are set up to help you learn the course content and become more comfortable talking (and thinking) about biology. Your grade in the class is heavily weighted on exams. The other activities are designed to help you learn the content you'll need for the exams.

Lectures (5% of total grade)
Scoring: 1 (complete) or 0 (incomplete)

Course content is delivered through video lectures, and each lecture is accompanied by a series of tasks. (If the video lectures are difficult for you, you can also acquire course content by reading the textbook.) Here's how the lecture activities work:

First: Watch the lecture and take notes

Watch the video lecture and take notes (You can also find the lectures on YouTube, but I encourage you to watch them in Canvas, because then you don't have to watch ads.) Treat the video just like an in-person lecture. Your ability to take good notes is critical for your success in this course.

Next: Participate (meaningfully) in the discussion
The goal here is to engage with the course content *and your classmates* in a way that is meaningful for your learning. There are no required post numbers or word counts. The only requirement is meaningful participation. Some ways you might participate are:

Share something muddy or fun. This can include something you were confused about from the lecture, or something you thought was particularly cool.

Post extra-value resources like videos with explanations, images or links with descriptions, practice exam questions, vocabulary lists, or personal excerpts

Share metacognitive insights describing your thinking about the content and how your understanding may have changed (or deepened) as you engaged with the process.

Make authentic connections with classmates and help build our learning community.

Ask questions about the things that confused you.

I highly encourage you to visit and participate in the discussion a couple times. Because we're running an asynchronous class, the discussion forum will change over time. Come back and see what else you can learn.

Labs (25% of total grade)
Scoring: 10 possible points, including data, analysis, marked for completion

Each week, there will be one lab assignment to complete. Each lab will include some sort of task as well as a discussion forum. And please know-- each lab is designed to take about 3 hours to complete. If they are taking you much longer, let's talk.

Labs are a required part of this course. If you do not earn 70% of the lab points, you cannot pass the class.

Case Studies (25% of total grade)
Scoring: 10-30 possible points, including discussion, rough drafts, final drafts (marked for correctness)

Each week, you will be provided information regarding a clinical case. There will be four case studies throughout the semester. Each case study will start with some sort of discussion forum. The second component of the case studies will include a rough draft followed by a final draft the third week of each unit.

Case Studies are a required part of this course. If you do not earn 70% of the case study points, you cannot pass the class.

Weekly Online Quizzes (5% of total grade)
Scoring: 5 points (marked for correctness)

Administered through Canvas, these short quizzes (one per lecture) will cover the week's material. You can take them as many times as you want, and Canvas will record your high score. Quizzes mimic the format of the multiple-choice exams in this class. Each quiz will cover one topic, so you can practice that topic as much as you want. Most quizzes are 5 questions long, timed (about 1 min/question), and they pull from a bank of questions, so each time you take the

quiz, you'll get a different set of questions on the topic. You are not shown the correct answer on the quizzes, but I encourage you to discuss them with your classmates, especially if you find something tricky. All quizzes are due Sunday night by 11:59pm, but you are welcome to continue taking them for practice, even after the due date.

Exams (40% of total grade)
Scoring: 50-100 points (marked for correctness)

There will be four midterm exams throughout the semester that cover material from both lecture and lab, as well as a comprehensive final exam. BE AWARE: There are no make-up exams of any type, unless you have a verifiable, unavoidable, and extreme circumstance.

Final Exam
You will have a comprehensive multiple choice final exam.

HONOR STATEMENT
I promise that the work I do on this exam is my own. I will not consult with any other humans when completing this exam. I understand that I am allowed to use the resources I've created and collected in my External Brain, but I will not use the internet or my textbook to search for information or answers.

This honor statement is designed to ensure the integrity of the exam process, which is an important part of helping support your deep learning and skill building in this class. Please let me know if you have questions or concerns about this.

Prerequisites/corequisites/ recommended preparation

Prerequisite: BIOL3 - Fundamental Cell Biology
To succeed, students must be college ready and have a solid foundation in cellular biology including the ability to explain the structure and function of cells including membrane structure, organelle function, and protein synthesis.

Objectives
- LAB and LECTURE: Identify and describe biological molecules and cell structures and explain their functions.
- LECTURE: Compare and contrast cellular processes and interactions between prokaryotes and eukaryotes (including metabolism, reproduction, communication) .
- LECTURE: Relate evolutionary processes to the origin and evolution of cells.

Outcomes
Identify and describe biological molecules and cell structures and explain their functions.
Compare and contrast cellular processes and interactions between prokaryotes and eukaryotes (including metabolism, reproduction, communication, and genetics).
Explain how DNA replicates and transmits genetic information within organisms.

AND

Prerequisite: BIOL6 - Human Anatomy
To succeed, students have a solid foundation in human structure, including the ability to recognize normal structure and describe basic function of human tissues, organs, and organ systems.

Objectives

- Identify cellular structures and describe how they contribute to the diverse functions of different cell types (lab and lecture).
- Identify diverse cell types, and explain how diverse cell types become organized into tissues with unique properties (lab and lecture).
- Identify diverse tissue types, and explain how diverse tissues become organized into organs with unique properties (lab and lecture).
- Identify the organs that comprise specific organ systems, and explain how each organ contributes to the function of the organ system as a whole (lab and lecture).
- Recognize anatomical pathology and explain how alterations of structure at molecular, cellular, and histological levels can lead to organ and organ system pathology (lab and lecture).
- Diagram the anatomy of afferent and efferent neural pathways, from receptor/effector organs to spinal cord and/or appropriate brain region (lab and lecture).
- Explain the overall function of each organ system (lecture).
- Compare and contrast the cardiovascular system with the lymphatic system, the nervous system with the endocrine system, and the integumentary with the digestive system (lecture).
- Use anatomical terminology to indicate body regions and structures, and to identify and describe surface features (lab).
- Identify skeletal muscle organs and muscle features (lab).
- Identify peripheral nerves and their receptors or targets (lab).

Outcomes

- Describe key structural features of different human cell and major tissue types.
- Identify and describe the anatomy of the systems of the human body.
- Relate structure and function at the cellular through system levels of organization of human body systems.
- Describe structural or anatomical changes that occur in disease, injury or aging of the human body systems.

OR

Prerequisite: BIOL1 - General Biology
To succeed, students must be college ready and have a solid foundation in cellular biology including the ability to explain the structure and function of cells including membrane structure, organelle function, and protein synthesis.

Objectives

- Identify and describe biological molecules. (LEC)
- Identify cell structures and explain their functions. (LEC/LAB)
- Explain how DNA replicates and transmits genetic information within organisms. (LEC)
- Relate DNA function to an organism's phenotype. (LEC/LAB)
- Apply the processes of scientific inquiry and experimental design to the study of biological concepts. (LAB)

Outcomes

- Apply the process of science to critically evaluate observable phenomenon. (LAB)
- Describe attributes of life and explain how cells fulfill these characteristics. (LEC)

AND

- Prerequisite: BIOL6 - Human Anatomy

• To succeed, students must have a solid foundation in human structure, including the ability to recognize normal structure and describe basic function of human tissues, organs, and organ systems.

Objectives

- Identify cellular structures and describe how they contribute to the diverse functions of different cell types (lab and lecture).
- Identify diverse cell types, and explain how diverse cell types become organized into tissues with unique properties (lab and lecture).
- Identify diverse tissue types, and explain how diverse tissues become organized into organs with unique properties (lab and lecture).
- Identify the organs that comprise specific organ systems, and explain how each organ contributes to the function of the organ system as a whole (lab and lecture).
- Recognize anatomical pathology and explain how alterations of structure at molecular, cellular, and histological levels can lead to organ and organ system pathology (lab and lecture).
- Diagram the anatomy of afferent and efferent neural pathways, from receptor/effector organs to spinal cord and/or appropriate brain region (lab and lecture).
- Explain the overall function of each organ system (lecture).
- Compare and contrast the cardiovascular system with the lymphatic system, the nervous system with the endocrine system, and the integumentary with the digestive system (lecture).
- Use anatomical terminology to indicate body regions and structures, and to identify and describe surface features (lab).
- Identify skeletal muscle organs and muscle features (lab).
- Identify peripheral nerves and their receptors or targets (lab).

Outcomes

- Describe key structural features of different human cell and major tissue types.
- Identify and describe the anatomy of the systems of the human body.
- Relate structure and function at the cellular through system levels of organization of human body systems.
- Describe structural or anatomical changes that occur in disease, injury or aging of the human body systems.

Educational Accessibility and Support

College of the Redwoods is committed to providing reasonable accommodations for qualified students who could benefit from additional educational support and services. You may qualify if you have a physical, mental, sensory, or intellectual condition which causes you to struggle academically, including but not limited to:

- Mental health conditions such as depression, anxiety, PTSD, or bipolar disorder
- Common ailments such as arthritis, asthma, diabetes, autoimmune disorders, and diseases
- Temporary impairments such as a broken bone, recovery from significant surgery, or a pregnancy-related disability
- Neurodevelopmental disorders such as a learning disability, intellectual disability, autism, acquired brain injury, or ADHD

- Vision, hearing, or mobility conditions

Available services include extended test time, quiet testing environments, academic assistance and tutoring through the LIGHT Center, counseling and advising, alternate formats of course materials (e.g., audio books, braille, E-texts), assistive technology, learning disability assessments, approval for personal attendants, interpreters, priority registration, on-campus transportation, adaptive physical education and living skills courses, and more. If you believe you might benefit from disability- or health-related services and accommodations, please contact Student Accessibility Support Services (SASS). If you are unsure whether you qualify, please contact Student Accessibility Support Services (SASS) for a consultation: sass@redwoods.edu.

SASS office locations and phone numbers

Eureka campus

- Phone: 707-476-4280
- Location: Learning Resource Center (Library)

Del Norte campus

- Phone: 707-465-2353
- Location: main building, near the Library

Klamath-Trinity campus

- Phone: 707-476-4280