

Human Physiology

BIOL2420

Instructor Information

Course Description

For HS and biology/science majors. A cellular and systemic approach to the study of body functions, including physical and chemical processes and interactions among the systems. Additional lab component (BIOL 2425) required.

Pre-Requisite(s): BIOL 1610; CHEM 1110 or CHEM 1210 (all w/C grade or better), and BIOL 2425 w/C grade or better or BIOL 2425 must be concurrent.

Semester(s): All

This is an intensive and in depth study of systems Physiology and intercellular mechanisms that maintain Physiological health.

Course Presentation

This is a lecture class with powerpoints. Class time will also include some active learning activities.

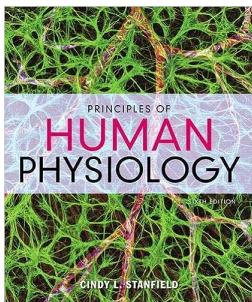
Course Student Learning Outcomes

- Students will be able to describe the organization of the body into organ systems and body fluid compartments. Students will be able to explain homeostasis and its significance to body function.
- Students will be able to describe the structure of the cell membrane and how different substances are transported across it.
- Students will be able to describe cellular metabolism, including the uptake, utilization, and storage of energy in carbohydrates, fats, and proteins. Students will be able to compare the differences in energy metabolism between the absorptive and postabsorptive states.
- Students will be able to describe the different chemical messengers and signal transduction mechanisms used in intercellular communication.
- Students will be able to discuss how the endocrine, nervous, muscular, cardiovascular, respiratory, urinary, digestive, and immune systems function and interact with one another to maintain homeostasis.

Course Prerequisites

Prerequisites for Biology 2420 is Chemistry 1110 or 1210 and College Biology 1610 with lab 1615.

Required Textbook or Materials

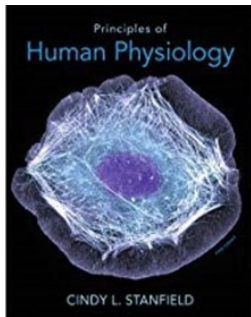


Title: Principles of Human Physiology

Subtitle: Edition 5 or 6 or SLCC custom 2nd edition

Authors: Cindy L. Stanfield

Publisher: Pearson



Title: Human Physiology 5th Edition

Authors: Stanfield

For more information on textbook accessibility, contact Accessibility & Disability Services at ads@slcc.edu.

Communication Plan

Example language:

I will respond to email within 1 day

I will offer feedback on major assignments within 1 week

The best way to contact me is via the Canvas Inbox, as I will prioritize this email over other modes of communication.

Course Learning Environment

My hope is that all of us together will create a learning environment that supports a diversity of thoughts, perspectives and experiences, and honors your identities (including race, gender, class, sexuality, religion, ability, etc.) To help accomplish this:

- No discrimination is tolerated based on anyone's race, gender, sexuality, religion, abilities, English language proficiency or socio-economic circumstances. Please always choose kindness and patience in our class communications, there is space for all of us here. Free Speech does not include Hate Speech. Please express your opinions without hateful language or inciting violence.
- If you have a name and/or set of pronouns that differ from those that appear in your Canvas handle, please let me know so I can address everyone in a way that makes

them feel comfortable and safe.

- I (like many people) am still in the process of learning about diverse perspectives and identities. If something was said in any of the class materials and discussions (by anyone) that made you feel uncomfortable, please talk to me about it. You can email me directly or send feedback via the anonymous open survey on our Canvas site.
- This is a science based course. We deal with facts. If I say something in class that is different from what you have heard or read, please check your text book or ask me for documentation. I have peer reviewed articles that I can email you.
- If you feel like your performance in the class is being impacted by your experiences outside of class, please don't hesitate to let me know. I will try to work with you. I want to be a resource for you and help you learn these materials without causing too much stress. I promise to treat everyone with compassion.

General Course Policies

Classroom recordings: I will make an audio recording of the lecture and this will be available on canvas under Modules. This is very helpful for studying. If you have a commute to school or work listen to the lecture. I test on what I SAY and on the Powerpoint. This is an in-person class. No video of the class is available.

Attendance at one of the first two class lectures is MANDATORY! If you do NOT attend at least one of the first two lectures, YOU RISK BEING DROPPED from the course. I will take attendance for the first 3 weeks. In addition, please attend as many class sessions as possible. It will truly help your grade and allow you to get your questions answered promptly. Each class will have a 1 question group quiz AND a 1 point recall activity - no make up. Not coming to class will cost you two points each time. If you cant attend class regularly, you should consider a hybrid (once a week), or online class.

Snow Day: Days with bad weather will mean online broadcast classes at the same time as our usual class. It is the students' responsibility to check the Canvas announcements before coming to class. I will put the notice on canvas and email you through the school website. Make sure your email is up-to-date. I can not text you. Broadcast classes will be

on Zoom within the Canvas program and a link will be in the Canvas Announcements. These lectures are recorded.

Incomplete Grade and Withdraw from Class: A grade of “I” (Incomplete) is the instructor’s option and is not given except in the most extenuating of circumstances for which there is verifiable written documentation. In order to receive an incomplete, nearly all course work must have been completed (e.g. ~75%) with a passing grade. The withdrawal dates are on your class schedule. It is the responsibility of the student to drop/withdraw from this class, not the instructor.

Academic Dishonesty: Is absolutely NOT tolerated and includes all forms of cheating and plagiarism as outlined in the Student Code. Penalty for first offense will be an “E” for the course. Some of the behaviors that count as academic dishonesty include but aren’t limited to: searching the internet for answers during a quiz or test. Using notes or the book during a test unless it is specified as “open book”. Sharing quiz or test answers with another student. Making a photo, copy, screen print or other image of a test or quiz question or placing quiz or test questions on any website.

NOTE: Begging for a higher grade at the end of the term is a form of Academic Dishonesty and will result in an incident report filed with SLCC.

Artificial Intelligence

Generative artificial intelligence (AI) software is a rapidly emerging tool that students may be interested in using. If doing so, SLCC students are expected to adhere to the same standards as the Code of Student Rights and Responsibilities statement on plagiarism. Presenting generative AI software content as your own is a violation of academic integrity. If you use generative AI in your work, you must indicate that you have done so.

SLCC Academic Policies: SLCC academic policies may be found in the [SLCC 2023-2024 Catalog](#), and the [Code of Student Rights and Responsibilities](#).

Keys to Success

I strongly recommend that you study every day.

- Use colored pencils/markers to help you learn flow charts and cycles in detail.
- Review the chapter before class. Specifically to identify vocabulary you don't know.

- Review and or print the powerpoint before class.
- Take notes!!!! I test on what I say!
- English Proficiency can be a challenge in this Class, even for students with English as a first language. You will hear new words every day. Use an online dictionary or Youtube to learn their meaning and pronunciation. Being comfortable with the words of Physiology and USING the words of Physiology will increase your grade and understanding. SLCC has an Academic Literacy Center to provide tutoring in reading and conversation. The Student Writing Center can help you with your short answer test questions.
- Technology: Each day in class, we will answer an online canvas quiz question. You can do this on your phone, laptop, or tablet with the Canvas App. (students can always write the answer on paper.) You will need a laptop to take the Final Exam in the Classroom. See the section on SLCC support for information on Laptop loans.

Free STEM Tutoring

STEM Learning provides free tutoring services and textbook checkout to students enrolled in various courses offered by the School of Science, Math, and Engineering.

Tutoring is provided as a drop-in service only, except in certain circumstances.

Please visit <https://www.slcc.edu/stem/tutoring/index.aspx> for more information!

How to Navigate to Canvas

Description of Assignments/Exams

See Schedule in the Getting Started in Physiology Canvas Module to know when each chapter is covered. Also TEST DATES!

Quizzes will be administered using Canvas Quizzes. You have Friday - Monday to take the weekly quiz. You have 2 minutes to answer each question. There will be between 6 and 8 questions. This is OPEN BOOK, OPEN NOTE – NOT OPEN INTERNET. That

means to answer the questions within the time limit you need to study first! NOTE: Internet answers are often wrong or not specific enough for our class. 1 quiz is dropped.

Section Tests will be given on Canvas in the Testing Center. You will have a time limit of 90 minutes. Normally you will have two days to take the tests. TEST DATES ARE IN THE SCHEDULE. Testing is not during class time. Each test is worth 100 points. NO Tests are dropped. You must take all 4 tests. MAKE UP EXAMS ARE AT THE DISCRETION OF THE INSTRUCTOR AND MUST BE ARRANGED BEFORE THE EXAM! You will have an opportunity to make up missed test questions on Sections 1-3.

If you choose to take a vacation during the semester, note that Test make up is can not be assumed or guaranteed. Review the schedule and make sure you aren't gone during a scheduled test.

An open book, open note Final is given during Finals week. This is in the classroom. You will need a laptop.

There are just a couple actual homework assignments in this class. About 1 assignment per section.

There are 2 extra credit assignments in this class

Grading Scale

Section tests 1-4 (100 Points each)	400 points	
Homework and quizzes	150	
Final	50	600

Points	Grade	Percent
600-552	A	92-100
551-540	A-	91-90
539-528	B+	88-89
527-492	B	82-87
491-480	B-	80-81
479-468	C+	78-79
467-432	C	77-72
431-420	C-	70-71
419-408	D+	68-69
407-372	D	62-67
371-360	D-	60-61

College Wide Student Learning Outcomes

SLCC has identified nine essential capacities all students should strengthen, regardless of academic major or career plans, that will serve students in all aspects of life.

- Acquire substantive knowledge in the intended major and throughout General Education
- Communicate effectively
- Develop quantitative literacies necessary for the chosen field of study
- Think critically
- Express themselves creatively

- Develop civic literacy and the capacity to be community-engaged learners who act in mutually beneficial ways with community partners
- Develop the knowledge and skills to work with others in a professional and constructive manner
- Develop information literacy
- Develop computer literacy

Institutional Policies

As members of our academic community, we would like to invite you to review the Institutional Syllabus which covers important policies and procedures. This document contains important links for students on the code of student rights and responsibilities, academic integrity, and grading policies, Title IX and other important acknowledgements. By familiarizing yourself with this information, you can help us create a safe and respectful environment for everyone.

You can access the document by clicking on the following link:

<https://slcc.instructure.com/courses/530981/pages/institutional-syllabus>

Learning Support and Tutoring Services

We are pleased to offer a range of tutoring and learning support services to help you achieve your academic goals. Whether you need assistance with a specific subject or want to improve your study skills, you have many options for tutoring or other support.

To learn more about the services we offer and how to access them, please visit the Institutional Syllabus under the Tutoring and Learning Support tab:

<https://slcc.instructure.com/courses/530981/pages/institutional-syllabus>. We encourage you to take advantage of these resources to help you succeed in your studies. If you have any questions or would like to schedule a tutoring session, please don't hesitate to reach out to us. We are here to support you in any way we can.

Mission Statement on Anxiety in the Classroom and During

Testing

Being anxious about tests is normal. After all, you want to do well in the class and the class is important to the future goals you have chosen for yourself. Compounding that, some of you have taken the class before and want to improve your grade. This puts additional pressure on students who are trying to find better ways to study and more time in their busy schedules to devote to the class.

What I can and will do to reduce stress.

1. Each chapter ppt has learning outcomes at the end. This way you know the items I think are important and this is where you want to start your chapter review.
2. I give study guides. These are not for me and don't count as points. This is my way of telling you what subjects will be on the test. This will help you focus your studying. Note: that I do write hard test questions. Questions that need to be read carefully.
3. I am happy to meet with you in person or on zoom to suggest additional ways to study
4. I can help you connect with the mental health counseling professionals here at school. Its only \$15 a session and no insurance is needed.
5. I can help with suggestions for coping with anxiety during the test itself and tell you the things I can do to help you.

What you can do for yourself to reduce stress and anxiety

1. Be prepared. Of course, if you know you didn't study, then you will have more stress
2. Be organized. Use a calendar to plan out your study time along with your work and home schedules. Know when tests are in advance so you can arrange work schedules to give you more time. If you want me to treat you as a serious, dedicated student, then don't tell me you didn't know there was a test that day.
3. Get physical exercise. It reduces stress and it clears your mind. Or you can multitask. Walk on a treadmill and listen to past lectures or review flash cards. Make the most of your time.

4. Practice mindfulness. Lots of internet resources about this. Be aware of your thoughts. Don't let negative thoughts take you for a self-defeating ride. To be mindful means when a negative spiral starts you counter it with: thoughts of things you are thankful for, awareness of your physical surrounds (ie: name 5 things you can hear, etc.)

Student Academic Calendar

As students you should be aware of all important dates in the semester, such as the day that courses begin and end, as well as the drop date and the last day to withdraw. To learn more about those dates, navigate to the Student Academic Calendar below:

[SLCC Student Academic Calendar](#)

SLCC Support

General Learning Support & Tutoring Services: General Learning Support & Tutoring Services provide support for SLCC students enrolled in any class at the College. All resources are provided free-of-charge. Ask your instructor about discipline-specific learning support and tutoring services. PLUS: Question Hours!! Formerly called Office Hours.

- Tutoring and Learning Centers: provide free assistance in Math, Science, Accounting, CSIS and Allied Health Classes at 6 campus locations.
- Dream Center for undocumented/DACA students can provide help with scholarships and resources - on the West Valley Campus.
- Microloan - the bookstore will loan you the money to get your books.
- Printing - you receive 50 free pages per semester. You need your one card. Any of the computer centers on any campus.
- Lactation Room for nursing mothers. - in the JHS building
- Gender Neutral Single Bathrooms - HTC first floor near cafe. JHS first floor south-east corner, Student Center 1st floor near the elevators.
- Food Pantry - called Bruin Pantry. Food, fresh fruit and veggies, diapers, mensural products - in the Jordan Student Center.

- Housing and Homelessness - The Thayne Center has a Basic Needs Counselor to help you with housing.
- Student Writing Center: provides in-person and online feedback on all writing assignments - for help with your short answer test questions.
- Academic Literacy Center: provides tutoring in reading and conversation. USE this if your English language skills are holding you back in class.
- Library Services: provides research help, print and online resources, computers and study space. YOU CAN CHECK OUT A LAPTOP FOR THE WHOLE SEMESTER.
- Advising and Counseling Support Services: Advising and Counseling Support Services provide support for students enrolled in any class on the college.
- Center for Health and Counseling: provides health care, mental health counseling, massage therapy services and healthy lifestyle programs. Student services are FREE or \$15. Including Flu and Covid Shots. No insurance needed.
- Veterans' Services: assists hundreds of students in using their VA education benefits each semester.
- The Student Engagement, Experience and Achievement Center: Student Center Rm 101, Redwood Campus includes all previous multicultural, gender and sexuality, and immigrant/undocumented services.

Advising and Counseling Support Services

At our institution, we are committed to supporting your academic and personal growth. That's why we offer a range of advising and counseling services to help you navigate the challenges of college life. To learn more about the resources available to you and how to access them, please visit the Institutional Syllabus under the Advising and Counseling Support Services tab: <https://slcc.instructure.com/courses/530981/pages/institutional-syllabus>. Our advising team and the support centers across campus are here to support you in achieving your goals and overcoming any obstacles you may face.

Assignment Schedule

Due Date	Assignment Name	Assignment Type	Points
	2024 Assessment Quiz	Quiz	0
	Ch 16 Recall	Assignment	1
	Chapter 7 Recall	Assignment	1
	Group Quiz Ch 12 B Physiology	Quiz	1
	Group Quiz Ch 19 Physiology	Quiz	1
	Group Quiz Chapter 17 Physiology	Quiz	1
	Group Quiz Chapter 6 Endocrine	Quiz	1
	Physiology Assessment Extra Credit Sp 24	Assignment	0
	Physiology Chapter 12 Group Quiz	Quiz	1
	Physiology Open Book Final Spring 24	Quiz	50
	Physiology Practice Quiz Section 2	Quiz	0
	Physiology Section 3 Practice Test - NEW	Quiz	0
	Physiology Section 4 Test Spring 24	Quiz	100
	Recall Ch 6 Endocrine	Assignment	1

Due Date	Assignment Name	Assignment Type	Points
	Recall Chapter 5 Physiology pt 1	Assignment	1
	Recall - Chapter 3: Cell Metabolism	Discussion	0
	Recall Ch 10 Sensory	Assignment	1
	Recall Ch 11 Physiology	Assignment	1
	Recall Ch 13 -14	Assignment	1
	recall Ch 14	Assignment	1
	Recall Ch 18	Assignment	1
	Recall Ch 19 Phys	Assignment	1
	Recall Ch 3 Physiology	Assignment	1
	Recall Ch 4 part 2	Assignment	1
	Recall Ch 5 & 20 Physiology	Assignment	1
	Recall Chapter 12 pt 2	Assignment	1
	Recall Chapter 15 Blood	Assignment	1
	Recall Chapter 17	Assignment	1
	Recall Chapter 4 part 1 Physiology	Assignment	1
	Recall Chapter 7 and 8	Assignment	1
	Recall for Ch 12 part 1 Physiology	Assignment	1

Due Date	Assignment Name	Assignment Type	Points
	Recall for Ch 13	Assignment	1
	Recall for Chapter 8 & 9.4	Assignment	1
	Section 2 Test Physiology Spring 24	Quiz	100
	Section 3 Test Make up	Assignment	0
	Section 3 Test Physiology Spring 24	Quiz	100
	Section 4 Practice Test Physiology	Quiz	0
	Test Correction	Assignment	0
	Weekend Quiz Chapter 23 Physiology	Quiz	6
	Wigger Diagram	Assignment	8
8/26	Group Quiz Ch 1 Physiology	Quiz	1
8/28	Group Quiz Chapter 3 Physiology	Quiz	1
8/28	Recall Ch 1 & 3 Physiology	Assignment	1
9/2	Introduce yourself	Discussion	3
9/2	Syllabus Quiz	Quiz	3.5
9/2	Weekend Quiz Ch 1 -3 Physiology	Quiz	8

Due Date	Assignment Name	Assignment Type	Points
9/4	Group Quiz Chapter 4 Physiology	Quiz	1
9/4	Homework Chapter 2 Physiology	Quiz	6.5
9/8	Weekend Quiz Chapter 4 Physiology	Quiz	6
9/9	Group Quiz Chapter 20 Physiology	Quiz	1
9/14	Physiology Section 1 Test Spring 24	Quiz	100