UNIVERSITY of HAWAI'I®
WINDWARD
COMMUNITY COLLEGE

PHYL 141: Human Anatomy and Physiology

3 Credits CRN 82924

CLASSROOM & TIMES: Hale Imiloa Rm 111, TR 9:00-10:15 AM

INSTRUCTOR: Ross Langston, PhD

OFFICE: Imiloa 115

OFFICE HOURS: By appointment via Star Balance

TELEPHONE: 808-429-6218 (cell) Email: langston@hawaii.edu

EFFECTIVE DATE: Fall, 2026

WINDWARD COMMUNITY COLLEGE MISSION STATEMENT

Windward Community College offers innovative programs in the arts and sciences and opportunities to gain knowledge and understanding of Hawai'i and its unique heritage. With a special commitment to support the access and educational needs of Native Hawaiians, we provide the Ko'olau region of O'ahu and beyond with liberal arts, career and lifelong learning in a supportive and challenging environment — inspiring students to excellence.

CATALOG DESCRIPTION

PHYL 141 is the first semester of a comprehensive two-semester course which provides a thorough introduction to the structure and function of the human body. PHYL 141 covers the gross anatomy, histology, and physiology of the integumentary, skeletal, muscular, and nervous systems. Students will be expected to learn details of anatomy and physiology as well as applying those details in the broader context of whole-body function and homeostasis. The covered topics include body orientation, chemical level, cellular level, tissue level, integumentary system, bone tissue, skeletal system, joints, muscular tissue, muscular system, nervous tissue, spinal cord and spinal nerves, brain and cranial nerves, autonomic nervous system, and special senses. (3 hours lecture)

STUDENT LEARNING OUTCOMES

Upon successful completion of PHYL 141, the student should be able to:

1. Identify required anatomical structures of the covered systems
2. Identify required physiological functions of the covered systems
3. Describe metabolic processes of covered systems and relate them to everyday activities such as eating, sleeping, and exercise
4. Explain the concepts of positive/negative feedback and homeostasis and relate them to physiological processes covered in the course

COURSE CONTENT.

Concepts or Topics

The student will describe and integrate basic biological principles and define basic biological terms presented in lecture, required texts, and other instructional materials. These principles include the following areas:

- Philosophy and characteristics of science and the scientific method;
- The difference between hypotheses, theories and laws;
- Hierarchical architecture of the human body (cells, tissues, organs, and organ systems);
- The chemical composition of the human body and the functions of the major groups of biological molecules;
- Anatomy and physiology of cells including: protein production, cellular respiration, mitosis, and meiosis, senescence and cell death (apoptosis).
- Anatomy and physiology of the systems that make up the human body, including skeletal, integumentary, muscular, and nervous systems.
- Mechanisms for maintenance of homeostasis in the human body.

COURSE TASKS

1) Complete assigned readings prior to viewing the lectures.
2) Attend lectures and complete class activities
3) Complete weekly online quizzes.
4) Complete three in-class exam reviews
5) Complete three in-class examinations

ASSESSMENT TASKS AND GRADING

EXAMINATIONS (600 points total-200 points for each exam). You will take THREE in-class exams (non-cumulative) to demonstrate knowledge and understanding of information presented in the lectures, lecture outlines, text readings, and study guide activities. These are paper-and-pencil exams which consist mostly of multiple choice questions.

QUIZZES (130 points- 10 points for each quiz). You will complete 15 online quizzes which cover material from the lecture and reading. **Quizzes may be taken from home, but they MUST be taken by the indicated deadline (typically 11:00 PM each Friday**). Each quiz can be taken up to FIVE times; only the highest score will be saved. Please note that quizzes cannot be made up for any reason, including network problems or personal emergencies. The lowest TWO quiz grades will be dropped at the end of the semester. As with exams, quizzes will be timed (typically 30 s to 1 min per question, depending on difficulty). Quizzes may be taken open-book, but be warned that if you don't study beforehand you may not be able to complete the quiz before the deadline lapses.

PRACTICE EXAM/EXAM REVIEWS (60 points- 20 points each). I will administer an in-class practice exam prior to each unit exam. The purpose of the practice exam is to assess your comprehension of course material and help you to identify problem topics prior to the unit exam. The exam typically consists of 30-50 questions administered in 40 minutes (closed-book). These will be immediately graded using ZipGrade. I will then use the remaining class time to review commonly missed questions and answer student questions.

CLASS PARTICIPATION (60 points). Class participation will be assessed via class attendance, pop quizzes, and/or participation in clicker assessments. Each student is allowed one absence without penalty. Additional absences will result in a deduction of points from the class participation grade.

METHOD OF GRADING

The assignment of points will follow the general schedule below. There may be more or less points in the course depending on the final number of assignments.

Exams	600 points
Quizzes	130 points
Exam Reviews	60 points
Class Participation	60 points
TOTAL	**850 points**

GRADING SCALE

Percentage Points	**Grade**
90-100	A
80-89	B
70-79	C
60-69	D
0- 59	F

Please note that "N" grades are not given for this course.

Grades may be curved at the instructor's discretion; however, the student should use the above grading scale to evaluate their performance throughout the class. If you miss an examination because of an illness or legitimate emergency, you must contact the instructor **within 48 hours** to arrange a time to take a make-up exam. The instructor will request that the student present evidence of the illness or emergency that caused the student to miss the exam. If the student misses an exam for any other reason, the student may be prohibited from taking a make-up exam, thus failing to receive any points for the missed exam. While make-up exams will cover the same content area as a missed exam, the exam format and specific questions may be different.
No retests will be given for any reason.

EXTRA CREDIT

There are multiple opportunities for extra credit in the class including extra credit assignments (2) and Supplemental Instruction (see below). The total amount of extra credit available is capped at 75 points.

SUPPLEMENTAL INSTRUCTION: This class has a Supplemental Instruction (SI) leader. The SI leader will hold periodic review sessions prior to each exam. These reviews are optional, but I will award you five points extra credit for each review session that you attend (up to 15 points per an exam or 45 points total).

LEARNING RESOURCES

Textbook: Anatomy and Physiology UH OER
Course Website: lamaku.hawaii.edu
Socrative: We will be using Socrative for in-class clicker reviews.
https://api.socrative.com/rc/4kGyzv
You will need a smart phone, laptop, or tablet to participate. If you do not have one, let me know and I will provide one for you.
The classroom is "PHYL141F2F" Students who are absent may not receive points for the reviews.

CLASS DECORUM

As your instructor, I try very hard to create an atmosphere of mutual respect. This is a college class where students are welcome and encouraged to participate in class discussions and ask questions during the lecture. My only requirements are 1) that you are respectful in your interactions with me and your fellow students and 2) that you refrain from disruptive behavior. This includes making loud noises, talking on your cell phone (if you need to take a call, please do so in the hallway), or talking while I am speaking. If you are disruptive or disrespectful, I will give you a polite warning. If you continue to do so I will ask you to leave the class for the day. If you believe I am being disrespectful to you or anyone else in the class, please let me know!

As a reminder, smoking, vaping, and consuming drugs or alcohol are not allowed on the WCC campus. Harassment or violence of any kind is also prohibited (see below). Students who engage in these activities will be asked to leave immediately and referred to the Vice Chancellor of Student Services.

If you have questions about your grades or academic progress, please see me outside of the class (e.g., during office hours or contact me by email). I cannot discuss your grades during class time or in a situation that is not private, as this violates FERPA rules.

PARTICIPATION VERIFICATION

Campuses are required by federal regulations to verify the participation of students in their classes. In accordance with Executive Policy 7.209, all students in the University of Hawai'i system are required to establish "participation" to ensure that they are not dropped from their class(es). Effective fall 2021, students who fail to participate by the late registration period for a class will be administratively dropped from that class. Students may also be dropped from dependent prerequisite and/or corequisite classes if both courses do not establish participation.

DISABILITIES ACCOMMODATIONS

If you have a physical, sensory, health, cognitive, or mental health disability that could limit your ability to fully participate in this class, you are encouraged to contact the Accessibility Counselor to discuss reasonable accommodations that will help you succeed in this class. Jodi Asato, Disabilities Counselor, can be reached at (808) 235-7472, jodiaka@hawaii.edu, or you may stop by Hale Kākoʻo 105 for more information.

SEX DISCRIMINATION AND GENDER-BASED VIOLENCE RESOURCES (TITLE IX)

Windward Community College is committed to providing a learning, working, and living environment that promotes personal integrity, civility, and mutual respect and is free of all forms of sex discrimination and gender-based violence, including sexual assault, sexual harassment, gender-based harassment, domestic violence, dating violence, and stalking.

If you or someone you know is experiencing any of these, WCC has staff and resources to support and assist you. To report an incident of sex discrimination or gender-based violence, as well as receive information and support, please contact one of the following:

Leslie Cabingabang, UH System Confidential Advocate
Phone/Text: (808) 348-0432 or (808) 341-0952
Email: advocate@hawaii.edu
Office: Hale Kākoʻo 107 (Wednesdays)

Mykie E. Menor Ozoa-Aglugub, J.D., Title IX Coordinator
Phone: (808) 235-7468
Email: mozoa@hawaii.edu
Office: Hale Kakoʻo 109

As a member of the University faculty, I am required to immediately report any incident of sex discrimination or gender-based violence to the campus Title IX Coordinator. Although the Title IX Coordinator and I cannot guarantee confidentiality, you will still have options about how your case will be handled. My goal is to make sure you are aware of the range of options available to you and have access to the resources and support you need.

For more information regarding sex discrimination and gender-based violence, the University's Title IX resources and the University's Policy, Interim EP 1.204, go to manoa.hawaii.edu/titleix/

Student Responsibilities

STUDENT RESPONSIBILITIES

You are expected to attend lectures, participate in all course activities, and complete all examinations and course assignments on time. Please be considerate of other students by turning off any cell phones or beepers during class. Any changes in the course schedule, such as examination dates, deadlines, etc., will be announced ahead of time. It is your responsibility to be informed of these changes. It is also your responsibility to be informed about deadlines critical to making registration changes (e.g., last day for making an official withdrawal).

HOW TO SUCCEED IN THIS CLASS

Although you will be given lecture outlines, you will not succeed in this class without attending lectures and taking detailed notes on the corresponding material in the textbook. Merely reading the chapter will not suffice. Science courses at WCC generally require a minimum of two to three hours of independent study time for each hour in class. It is your responsibility to allocate the appropriate amount of time needed for study and be realistic about all personal and professional commitments that may infringe on your study time.

As part of your studies, you will need to understand a veritable *mountain* of medical and anatomical terms, most of which will probably be foreign to you. Many students find it helpful to enroll in HLTH 125 (Survey of Medical Terminology) at the same time as PHYL 141, as there is some repetition in the material covered. In this course, most important vocabulary words appear in **boldface** throughout your textbook. One way to learn these vocabulary words is to make flash cards to quiz yourself. Answering the matching and fill-in-the-blank questions located in the back of each text chapter can also be a helpful way to learn new terms. Be warned: Merely knowing the *definitions* of vocabulary words will be of little use if you do not know how the anatomy of the structures they represent.

In addition to vocabulary, you will be expected to have a detailed understanding of the mechanisms regulating human body systems. In many cases, these systems are regulated by negative feedback loops. **Knowledge of negative feedback mechanisms is absolutely crucial to understanding how the human body maintains homeostasis**. For example, you should know how the body maintains optimal blood calcium levels. To answer this type of question effectively, you will need to develop an intuitive understanding of how the body monitors blood calcium and what actions it takes when blood calcium is too low or too high. One way to do this is to make a diagram of how the feedback loop works. Most negative feedback loops have 3 parts. 1) a **receptor,** which monitors the condition (in this case, blood calcium levels) 2) a **control center** that "decides" when the condition has exceeded optimal set point values 3) and an **effector** that modifies the values of a controlled condition as directed by the control center. Once you have created your diagram (and labeled the above parts) you should ask yourself what type of **stimuli** may cause the controlled condition to drop below or exceed the setpoint and then trace the steps necessary to bring the controlled condition back into homeostasis (back to the setpoint).

My #1 Suggestion for success in this class: Take weekly quizzes EARLY, even if you have not had a chance to properly study for the quiz. This will prevent you from receiving a "zero" score should you forget to take the quiz by the deadline. It will also help you to better direct your studying so you can do better on future attempts for the same quiz. Remember, only your HIGHEST score is saved for each quiz. You will only be able to take each exam once. This means you should study diligently before going to the testing center to take the exam. NO RETESTS WILL BE GIVEN!

ACADEMIC DISHONESTY

In this class, students who commit academic dishonesty, cheating, or plagiarism will have the following consequence(s):

- Students will receive a failing grade for assignments or exams where cheating or plagiarism is documented.
- All cases of academic dishonesty are referred to the Vice Chancellor for Student Affairs.

Windward CC Student Conduct Information

UH System Student Conduct Policy EO 7.208

Academic Dishonesty

Academic dishonesty cannot be condoned by the University. Such dishonesty includes cheating and plagiarism (examples of which are given below), which violate the Student Conduct Code and may result in expulsion from the University.

Cheating

Includes but is not limited to giving unauthorized help during an examination, obtaining unauthorized information about an examination before it is administered, using inappropriate sources of information during an examination, altering the record of any grades, altering answers after an examination has been submitted, falsifying any official University record, and misrepresenting the facts in order to obtain exemptions from course requirements.

Plagiarism

Includes but is not limited to submitting any document to satisfy an academic requirement that has been copied in whole or part from another individual's work without identifying that individual; neglecting to identify as a quotation a documented idea that has not been assimilated into the student's language and style, or paraphrasing a passage so closely that the reader is misled as to the source; submitting the same written or oral material in more than one course without obtaining authorization from the instructors involved; or drylabbing, which includes (a) obtaining and using experimental data from other students without the express consent of the instructor, (b) utilizing experimental data and laboratory write-ups from other sections of the course or from previous terms during which the course was conducted, and (c) fabricating data to fit the expected results.

ALTERNATE CONTACT INFORMATION

If you are unable to contact the instructor, have questions that your instructor cannot answer, or for any other issues, please contact the Academic Affairs Office: Alakaʻi 121 (808) 235-7422

CLASS SCHEDULE

*** Please note this schedule is tentative & subject to change. Any changes will be announced in-class or on the course website!**

Week	Date	Topics	Text	Assignment Due FRIDAY
1	T 8/25 R 8/27	Course Intro Orientation to A&P	Syllabus CH 1	8/28: Quiz 1: Intro to A&P
2	T 9/1 R 9/3	Chemistry Biological Macromolecules	CH 2	9/4 Quiz 2: Chemistry
3	T 9/8 R 9/10	Intro to Cell & Membrane Trans Cellular Organelles & Cell Div.	CH3	9/11 Quiz 3: Cell Anatomy & Membrane Transport
4	T 9/15 R 9/17	Tissue Level of Organization	CH4	9/18 Quiz 4: Tissues Extra Credit: Hot Dog Histo
5	T 9/22 R 9/24	The Integumentary System **Exam #1 Review**	CH5	9/25 Quiz 5: Integument
6	T 9/29 R 10/1	**EXAM 1 (CH 1-5)** Bones & Skeletal Tissue	 CH6	
7	T 10/6 R 10/8	Axial Skeleton Appendicular Skeleton	CH 7 CH8	10/9: Quiz 6: Bone Tissue
8	T 10/13 R 10/15	Joints & Joint Movements Muscle Tissue & Phys	CH9 CH 10	10/16: Quiz 7: Skeleton Quiz 8: Joints
9	T 10/20 R 10/22	Muscular System	CH 11	10/23: Quiz 9: Muscles
10	T 10/27 R 10/29	**Exam #2 Review** Fundamentals of the Nervous System & Nervous Tissue	 CH 12	10/30: Quiz 10: Muscular Sys
11	T 11/3 R 11/5	**EXAM 2 (CH 6-11)** CNS I: The Brain	 CH 14	
12	T 11/10 R 11/12	**HOLIDAY: VETERANS DAY** CNS II: Spinal Cord	 CH 13	11/13: Quiz 11: Nervous Tissue
13	T 11/17 R 11/19	Cranial Nerves Peripheral Nervous System		11/20: Quiz 12: CNS Extra Credit: My Lobotomy
14	T 11/24 R 11/26	Special Senses **HOLIDAY: Thanksgiving**	CH 15	11/27: Quiz 13: PNS
15	T 12/1 R 12/3	Special Senses (Cont'd) Autonomic Nervous System	CH 15 CH 16	12/4: Quiz 14: Senses
16	T 12/8 R12/10	TBA **Exam #3 Review**		12/11 Quiz 15: ANS
	T 12/15	**Final Exam 10-12 AM**		

- Last day for full refund: September 1st
- Last day to drop without "W" grade: September 15th
- Last day to Withdraw ("W" entered on transcript): November 2nd