



UNIVERSITY of HAWAII®
WINDWARD
COMMUNITY COLLEGE

PHYL 142: Human Anatomy & Physiology

3 Credits (CRN 61138 & 61218)

Online, Asynchronous

INSTRUCTOR: Ross Langston, PhD
OFFICE: Imiloa 102
OFFICE HOURS: MW 11:00 AM 1:00 PM via [Google Meet](#) & F 11:30-12:30 Imiloa 102
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EFFECTIVE DATE: Spring, 2022

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 142 is the second semester of a comprehensive two-semester course which provides a thorough introduction to the structure and function of the human body. PHYL 142 covers the gross anatomy, histology, and physiology of the endocrine, cardiovascular, lymphatic, respiratory, digestive, urinary, reproduction systems as well as basic concepts of inheritance and development. 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 (3 hours lecture)

Activities Required at Scheduled Times Other than Class Times

Successful completion of this course will generally require six to nine hours of independent study each week. For more information, see p. 4 of this syllabus.

STUDENT LEARNING OUTCOMES

As a result of taking this course, students can expect to attain the following outcomes:

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 TASKS

1. Visit the course website a minimum of three times a week
2. Check UH email on a daily basis
3. View lectures and read chapters as assigned
4. Complete weekly online quizzes and practice exams
5. Complete three class examinations at a pre-approved UH testing center (ID required).

ASSESSMENT TASKS AND GRADING

EXAMINATIONS (600 points total-200 points for each exam). The student will take THREE exams (non-cumulative) to demonstrate knowledge and understanding of information presented in the lectures, lecture outlines, text readings, and study guide activities. **Exams must taken at a pre-approved UH Testing Center.** They will be timed (typically one minute/question) and may consist of multiple-choice, short answer, or essay questions. You will be allowed to take the exam one time only. Students will be asked to choose their testing center during the first week of class.

QUIZZES (120 points- 10 points for each quiz). The student will take 14 online quizzes which will 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 do not study beforehand you will not be able to complete the quiz before the deadline lapses.

CLASS DISCUSSIONS (60 points total- 20 points for each activity). Each student will complete three discussion board assignments on selected topics from the course text. The purpose of these assignments is to facilitate open discussion of course topics between students in the class. For discussion boards, you will be required to post a response based on the guidelines posted by your instructor. You will also be required to read and post responses to at least TWO of the posts from your fellow students. Both your initial post and your responses MUST be completed by the deadline. Be aware that some posts may require you to create informational videos using YouTube. For this reason, a webcam or other digital camera is mandatory for this course. Your posts and responses will be graded based on effort, clarity, and accuracy. The topics and guidelines for each discussion board will be posted on the course website under “Announcements” two weeks before the assignment is due.

EXAM REVIEWS (30 points). Students will complete a practice exam prior to each unit exam. The practice exam will consist of exam questions from previous semester and quiz bank questions. Students are allowed to take the exam review two times and only the highest grade will be saved.

METHOD OF GRADING

The table below reflects the *approximate* distribution of points for the class. Note that the total number of points in your class may be smaller or greater, depending on the number of

assignments and quizzes. Rest assured that the calculation of final grades will always follow the percentage cutoffs below.

Exams	600 points
Quizzes	120 points
Discussions	60 points
Exam Reviews	30 points
TOTAL	810 points

GRADING SCALE

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

Please not 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.

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:

- Anatomy of the endocrine systems and physiology of hormone actions
- Functions and components of blood
- Anatomy of the heart and regulation of heart rate and cardiac output
- Anatomy of blood vessels and regulation of blood pressure and blood flow
- Mechanisms of general and specific resistance
- Anatomy and physiology of the respiratory system
- Digestive anatomy, processes, nutrition, and metabolism
- Anatomy of the urinary system, renal physiology, and fluid & electrolyte homeostasis
- Anatomy and physiology of male and female reproductive systems
- Physiology of pregnancy and fetal development
- Genetics and inheritance

LEARNING RESOURCES

Textbooks: OpenStax College. (2013). Anatomy & physiology. Houston, TX: OpenStax CNX. Retrieved from <http://cnx.org/content/col11496/latest/>

Lecture Outlines: PowerPoint outlines for course lectures are available on the course website.

Laulima: Your instructor has created a [laulima website](#) to accompany this course. This website contains links to lecture outlines, lab activities, and review materials. All students enrolled in the class are automatically granted access to the course website. You will need a UH email account to access the Laulima site.

Adobe Reader: You will need to download a recent copy of adobe reader to view the lecture files. A copy is available at: <http://get.adobe.com/reader/>

ADDITIONAL INFORMATION (This may be included here or in an appendix.)

STUDENT RESPONSIBILITIES

You are expected to view all course lectures, read assigned material, complete weekly quizzes, and complete discussion board assignments and exams as outlined in the course schedule. Any changes in the course schedule, such as examination dates, deadlines, etc., will be announced via email and/or the course website. 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 lecture 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 (see chapter 6). 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** which “decides” when the condition has exceeded optimal set point values 3) and an **effector** which 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 types 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!**

MySUCCESS Students may be referred for extra help or advising through MySuccess. Students can also explore resources at MySuccess.Hawaii.edu and windward.hawaii.edu/MySuccess

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. Roy Inouye can be reached at (808) 235-7448, royinouy@hawaii.edu, or you may stop by Hale Kāko‘o 106 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:

Jojo Miller, Confidential Advocate
 Phone: (808) 348-0663
 Email: advocate@hawaii.edu
 Office: Hale Kāko‘o 110

Desrae Kahale, Mental Health Counselor & Confidential Resource
 Phone: (808) 235-7393
 Email: dkahale3@hawaii.edu
 Office: Hale Kāko‘o 101

Karla K. Silva-Park, Title IX Coordinator
 Phone: (808) 235-7468
 Email: karlas@hawaii.edu
 Office: Hale ‘Ākoakoa 220

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/

ACADEMIC INTEGRITY

Students involved in academic dishonesty will receive an "F" grade for the course. Academic dishonesty includes cheating and plagiarism. All cases of academic dishonesty are referred to the Vice Chancellor for Student Affairs. See the most recent course catalog for a description of the College's policies and procedures concerning academic dishonesty.

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:

- Location: Alaka'i 121
- Phone: (808) 235-7422

PHYSIOLOGY 142 ONLINE (CRN 61138 & 61218) Spring, 2022

*** 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	1/10-1/14	Course Intro/Endocrine System	CH 17	1/14: Chapter 17 Quiz
2	1/17-1/21	Blood	CH 18	1/21 Chapter 18 Quiz DB#1
3	1/24-1/28	The Heart	CH 19	1/28 Chapter 19 Quiz
4	1/31-2/4	Blood Vessels and Hemodynamics	CH 20	2/4 Chapter 20 Quiz
5	2/7-2/11	Exam #1 Review		2/11: Exam 1 Review
6	2/14-2/18	Lymphatic System Immunity	CH 21	2/18 EXAM 1 (CH 17-20)
7	2/21-2/25	Respiratory System	CH 22	2/25: Chapter 21A Quiz Chapter 21B Quiz
8	2/28-3/4	Digestive System	CH 23	3/4: Chapter 22 Quiz DB#2
9	3/7 -3/11	Nutrition and Metabolism	CH 24	3/11: Chapter 23 Quiz
	3/14-3/18	SPRING BREAK		
10	3/21-3/25	Exam #2 Review		3/25: Chapter 24 Quiz Exam 2 Review
11	3/28-4/1	Urinary System	CH 25	4/1 EXAM 2 (CH 21-24)
12	4/4-4/8	Fluid and Electrolyte Balance	CH 26	4/8: Chapter 25 Quiz
13	4/11-4/15	Reproductive System	CH 27	4/15: Chapter 26 Quiz
14	4/18-4/22	Pregnancy and Development	CH 28: 1319-1353	4/22: Chapter 27 Quiz
15	4/25-4/29	Heredity	CH 28: 1354-1386	4/29: Chapter 28A Quiz DB#3
16	5/2-5/6	Exam #3 Review		5/6: Chapter 28B Quiz Exam #3 Review

Important Dates:

- Last day for 100% Refund: January 18th
- Last day for 50% Refund: February 2nd
- Last day to drop without "W" grade: February 2nd
- Last day to Withdraw ("W" entered on transcript): March 28th