

Windward Community College Outline of Course Objectives

PHYL 141 Human Anatomy and Physiology, WWW Spring 2023, Jan 9-May 4, 2023

INSTRUCTOR: Michelle Smith

OFFICE: Imiloa 112B

ONLINE OFFICE HOURS: Floating office hour - email for apt **Go to:** https://meet.google.com/efn-pvsy-exj and join meeting

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CREDITS: 3

WINDWARD COMMUNITY COLLEGE MISSION STATEMENT

'O keia ka wā kūpono e ho'onui ai ka 'ike me ka ho'omaopopo i kō Hawai'i mau ho'oilina waiwai. Aia nō ho'i ma ke Kulanui Kaiāulu o ke Ko'olau nā papahana hou o nā 'ike 'akeakamai a me nā hana no'eau. Me ke kuleana ko'iko'i e ho'ohiki ke Kulanui e kāko'o a e ho'okumu i ala e hiki kē kōkua i ka ho'onui 'ike a nā kānaka maoli. Na mākou nō e ho'olako, kāko'o a paipai i nā Ko'olau a kō O'ahu a'e me nā hana no'eau ākea, ka ho'ona'auao 'oihana a me ka ho'onui 'ike ma ke kaiāulu — hō'a'ano a e ho'oulu i nā haumāna i ka po'okela.

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 O'ahu's Ko'olau region and beyond with liberal arts, career and lifelong learning in a supportive and challenging environment — inspiring students to excellence.

CATALOG DESCRIPTION

This is the first semester of a two-semester course in human anatomy and physiology which includes a study of human embryology, gross anatomy, microanatomy, physiology, pathology, and homeostatic relationships. This course is intended for students entering health care or medically related fields such as nursing, physical therapy and medical technology. (3 hours lecture)

Recommended Preparation: Registration in PHYL 141L.

Credits: 3 class hours

OFFICE HOURS

This class has 1 office hour. The meeting can be by phone upon request; however, the preference is for an online live meeting using Google Meet: **meet.google.com/efn-pvsy-exj**. I typically send out an announcement on Sunday for office hours. You need to be on time to be included in the meeting. I am happy to meet at other times as well; just send me an email. I will return all emails in regards to office hours within 24 hours. Also, weekends and holidays will have a slower response.

LEARNING RESOURCES

Required Instructional Materials:

Text: Anatomy and Physiology. Openstax. Publish Date: Apr 25, 2013

https://openstax.org/details/books/anatomy-and-physiology

Print:

• ISBN-10: 1938168135

• ISBN-13: 978-1-938168-13-0

Digital: ISBN-10: 1-947172-04-2
 ISBN-13: 978-1-947172-04-3

iBooks:

ISBN-10: 1-938168-30-5ISBN-13: 978-1-938168-30-7

License:

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STUDENT LEARNING 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.

TEACHING PROCEDURES

Coordination of lecture and laboratory experiences are the primary modes of instruction. The lecture generally emphasizes major concepts and physiological processes. The laboratory generally emphasizes anatomy from the gross to the microscopic level and associated structure-function correlations.

Students are encouraged to take responsibility for increasing their own comprehension and recall both by careful reading of assigned materials and by: taking advantage of opportunities for asking questions for clarification, answering questions posed in the text and supplementary sources, faculty office hours, and seeking out peer tutoring if necessary utilizing resources available in the academic learning computer center and learning resources center.

The primary purpose of the lecture will be to facilitate your learning of information already available in the text or in other sources available to you. You are expected to read the assigned readings before the lecture on that material. However, do not become discouraged if some of the material seems at first beyond your ability to master alone. This difficulty is expected. That is why the lecture exists-- to help you understand and find ways to recall the information. But the lectures will be most useful to those who have already struggled with the material as presented in the text and have a sense of where they most need help.

MODE OF INSTRUCTION

The previously described objectives will be achieved through the aid of the following learning activities:

• Pre-recorded lecture sessions viewable as PPTs, MP4's viewable on any media

- player, and on YouTube with captions.
- Internet-assisted activities and resources.
- Readings from textbook and instructor's study guides.
- Online discussions on human biology related topics
- Quizzes and examinations assessing the students' understanding of course content.

Lecture Approach will include:

Verbal presentation: The lecture format is provided using recorded PowerPoint slides. The slides are available for printing or saving to your hard drive. They can be downloaded from: **Laulima** under Syllabus- Recorded Lectures. The lectures are provided as a recorded PPT, MP4, and as a YouTube video with subtitles. They are all the same. Prior to listening to lecture, it is recommended that you print out the corresponding PowerPoint lecture. You may choose to print 3 or 6 slides per page, leaving enough room to take notes. You will find it easier to follow along if you have the printouts available.

Please Ask Questions:

Questions by students for clarification of the material under discussion are welcomed. Questions of clinical practice are best saved for the appropriate clinical course. Questions posed by the professor to the class will also be used to guide your thinking about the material and to check current understanding and recall.

Instructional Objectives:

This course is designed to help students build a comprehensive picture of the most important aspects of structure and function from the chemical level through the integration of organ systems into a healthy living human body. This course strives to establish a firm foundation of knowledge and study skills for students going on to more specialized course work in human biology, including courses in health-related fields which focus on how disease processes represent deviations from the norm.

All of the major systems of the human body are studied. Vocabulary (as well as concept mastery) is stresses on the assumption that this will be of considerable value to these students. References are made frequently to medical applications of the course content to help students see why the level of detailed required of them is valuable to the understanding of disease processes and treatment approaches.

Students should refer to the objectives stated in the text and lab manual; these will be modified and clarified as each topic is taken up in lecture-- often by handouts as each topic is discussed.

ASSESSMENT TASKS AND GRADING

Grading:

Exams (4): 60%
Article-based Class Discussion (4): 20%
Quizzes (13): 20%
Final Grade: 100%

Grading Scale:

Total Points	Grade
100-90%	Α
89-80%	В
79-70%	С
69-60%	D
59- 0%	F

Exams (60% points): Four exams will be given throughout the semester. Each exam is worth **15%** of your final grade. <u>This semester</u> you will take the exams from home. You will be required to sign an honor pledge. Exams are 50 multiple choice questions, and closed book, but the student is allowed a 2-sided 3x5" handwritten note card. You will have 1 hr and 50 minutes to take the exam. The final exam is non-cumulative.

If the student misses an examination because of an illness or legitimate emergency, the student must contact the instructor as soon as possible to arrange a time to take a make-up exam. The instructor may 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.

Quizzes (20%):

Thirteen quizzes will be assigned for each chapter on Laulima. You will have 30 minutes to take the quiz. They are worth 10 points each. You can have an open book or search for answers on the web, but you cannot ask for assistance from another person.

Article-based Class Discussions (20%): Four article-based class discussions will be given at various times throughout the semester. They are each worth **20**% toward your final grade. Find a recent article (1-2 years old) related to the topics posted under discussion in Laulima. Discuss the topic with the class and provide a link to the article.

Review an article of your choice related to each one of the topics listed below. A good source of reliable articles can be found on Science Daily. Science Daily provides a summary of primary literature. Scrutinize where your information comes from. Don't use fact-based sites like WEBMD or random internet biased sources; however, internet journals are O.K. to use.

TOPIC 1: Stem Cells—

Stem cells have the potential to develop into various tissues in our body. Research in this area suggests that stem cells may be useful in curing various disorders. However, the use of embryonic stem cells is controversial. Find an article related to the uses and benefits of stem cells, the ethical concerns, or funding provided by the federal government. Here is a web site you may find useful for background information: https://stemcells.nih.gov/info/basics/1.htm

TOPIC 2: Cancer-

One in four of us will have cancer in our lifetime. Some of it is preventable, such as from smoking, asbestos, or from UV damage, but other types may be genetic, or other types of environmental concern. This is a wide-open topic. Select a particular type of cancer and discuss the disease and treatment.

TOPIC 3: CRISPR Technology-

Human genome editing has many potential therapeutic applications and is anticipated to be among the most important areas of biomedical innovation. Discuss the use of CRISPR technology in gene editing human cells. Can it be used to cure disease or fix embryos? What are the implications of this technology?

TOPIC 4: Nervous System Disorder—

Alzheimer's, Parkinson's, Huntington's, Schizophrenia, Epilepsy, Cerebrovascular Disease (CVA) and Multiple Sclerosis, among others, are brain diseases that affect a great many of our population. Find an article related to one of these diseases listed, or choose one related to the nervous system. Be sure to describe the part of the nervous systems that is affected, its symptoms, how it affects the individual, and the latest treatment.

STUDENT RESPONSIBILITIES

Students are expected to be prepared in advance prior to watching the lecture. Being prepared includes having already read text materials. Complete all quizzes and exams on time. Participate in class discussions.

Any changes in the course schedule, such as examination dates, deadlines, etc., will be announced through email. It is the student's responsibility to be informed of these changes.

It is the student's responsibility to be informed about deadlines critical to making registration changes (e.g., last day of erase period and last day for making an official withdrawal.

HOW TO SUCCEED IN THIS CLASS

Understanding biological science involves understanding many difficult concepts and vocabulary, not just knowing facts. The student should know that the details to these concepts are important. In addition, the student will be introduced to hundreds of new words. In some cases, words that are familiar in a context other than biology will be introduced in the context of biology. The student will need to understand and use these terms in a biological science context.

While the student will have lecture outlines, the student will not succeed in this class without taking careful **lecture notes** and **reading** the corresponding material in the textbook before and after the lecture. The student should carefully **review** these lecture notes as often as possible. In addition, the students' study activities should include: **drawing** labeled diagrams or graphs that illustrate important biological phenomena (e.g., the internal structure of the cell, the stages of cell division, or the anatomy of the heart), reviewing all of the **internet** resource materials provided, and making **flashcards** for each new vocabulary word presented (refer to lecture outlines for a lists of required terms). On one side of the card, write the word. On the other side, write the appropriate biological science definition for the word. The student should use these card for self-testing as often as possible.

The textbook includes useful **study questions**. The student should try to answer all of these questions as though they were required assignments. It also has QR coded content that can be accessed by computer or cell phone.

The student should **ask** the instructor to explain the things that the student does not understand.

NATURAL SCIENCES DEPARTMENT ON WITHDRAWLS AND INCOMPLETE

- WITHDRAWALS (W GRADES) It is up to the student to know the withdraw date. Students who no longer attend class and who DO NOT OFFICIALLY WITHDRAW from the course will receive "F" grades.
- 2. INCOMPLETE (I GRADE) Students must present the "Request for Incomplete" form prior to the last day of instruction. "I" grades will be given only to students who are achieving passing grades and are very close to completing the course. In addition, the

student must have a very good reason for not being able to complete all the work on time.

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 Kākoʻo 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:

UH CONFIDENTIAL ADVOCATE

UH Confidential Advocate

Phone: (808) 348-0663

Email: advocate@hawaii.edu

TITLE IX COORDINATOR

Karla K. Silva-Park, Title IX Coordinator

Phone: (808) 235-7468

Email: karlas@hawaii.edu

Office: Hale Kāko'o 128

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

Work submitted by a student must be the student's own work. The work of others should be explicitly marked, such as through use of quotes or summarizing with reference to the original author.

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

Students will receive a failing grade for plagiarized assignments.

All cases of academic dishonesty are referred to the Vice Chancellor for Student Affairs.

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 121Phone: (808) 235-7422

TWO-WAY COMMUNICATION DEVICES

These devices are not allowed in the classroom. Please see to it that these devices are turned off while in class.

UH POLICY ON EMAIL COMMUNICATION

The electronic communications policy adopted in December 2005 establishes the University of Hawai'i Internet service as an official medium for communication among students, faculty, and staff. Every member of the system has a hawaii.edu address, and the associated username and password provide access to essential Web announcements and email. You are hereby informed of the need to regularly log in to UH email and Web services for announcements and personal mail. Failing to do so will mean missing critical information from academic and program advisors, instructors, registration and business office staff, classmates, student organizations, and others.