



PHYL 142L SYLLABUS

Fall 2022

Aug 23-Dec 5, 2022

PHYL 142L SECTION 63239:

Monday 8:30-11:15

Instructor: Michelle Smith

Office: Imiloa 112B

Online Office Hours: Email for apt and meet at <https://meet.google.com/efn-pvsy-exj>

Email: miliefsk@hawaii.edu

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

Laboratory to accompany PHYL 142. Reinforces the facts and concepts of human anatomy and physiology discussed in PHYL 142 through dissections, examination of models, laboratory activities, and other hands-on experiences. This course is intended for students entering health care or medically related fields such as nursing, physical therapy and medical technology. (3 hours laboratory)

Pre-Requisite(s): Credit for or registration in PHYL 142 or equivalent preparation or consent of instructor.

STUDENT LEARNING OUTCOMES

Upon successful completion of PHYL 142L, the student should be able to:

- 1) Use the scientific method to design and conduct a clinical research study.
- 2) Describe the anatomy of the endocrine, circulatory, lymphatic, respiratory, digestive, urinary, and reproductive systems from prepared slides, models, and real and virtual animal dissections.
- 3) Use basic laboratory and medical equipment (microscopes, sphygmomanometers, stethoscopes, ECG apparatus, & respiratory spirometers) to evaluate functions of the above body systems.
- 4) Use critical thinking to analyze and interpret clinical data.
- 5) Prepare an oral presentation and written summary of lab activities using the scientific method.

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. For lab, office hours occur immediately after class, but are available upon request. I will return all emails in regards to office hours within 24 hours. Also, weekends and holidays will have a slower response.

LEARNING RESOURCES

The following lab manuals are available online for free from the instructor's website:

- WCC's A&P PHYL 142 Lab Manual
- WCC's Histology Lab Manual
- **Textbook:** Anatomy and Physiology Openstax (hard copy (\$50) or online free OK)

Purchase:

- **PhysioEx 10.0;** cost is \$47.99
- PhysioEx 10.0: Laboratory Simulations in Physiology Plus Website Access Code Card for PhysioEx 10.0 -- Access Card Package (includes paperpack)
ISBN-13: 9780136643746
<https://www.pearson.com/store/p/physioex-10-0-laboratory-simulations-in-physiology-plus-website-access-code-card-for-physioex-10-0---access-card-package/P100002815487/9780136643746>
- **Supply list:** go to Laulima- Syllabus- Supply list, for a list of inexpensive supplies. This is only for online lab students. Most items can be purchased on Amazon.

*In Lab Only: In addition, many students find it helpful to bring a digital camera and USB flash drive to class in order to photograph anatomical specimens and exchange data files and pictures from the digital microscopes.

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

COURSE TASKS

- 1) Attend class at scheduled times.
- 2) Participate in lab activities.
- 3) Complete required exercises in lab manual.

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- 4) Complete 2 Practicals.
- 5) Present results of lab activities.

GRADING

Grading:

Laboratory practical exam	2x 250	500 points
Pre-Lab Quizzes (13)		100 points
Lab Manual/PhysioEx exercises		200 points
Lab Notebook		100 points
<u>Attendance</u>		<u>100 points</u>
TOTAL		1000 points

LABORATORY PRACTICAL EXAM (500 points). Two laboratory practical exams will be given during the semester. Each is worth 250 points each toward your lab grade.

The exam questions may consist of multiple choice, fill in the blank or a word bank, and pertain to: 1) any of the structures in the lab manual, or noted on handouts (referring to anatomical models and dissections); 2) the information related to physiology experiments performed; 3) any of the structures and functions on the assigned Slides.

Typically, exams cannot be made up; however, under unusual circumstances (emergencies) I may be able to fit a student in another lab time.

DO NOTE THAT THE LAST LAB PRACTICAL WILL BE HELD DURING THE LAST WEEK OF CLASSES, NOT FINALS WEEK.

PRELAB QUIZZES (100 points total). A prelab quiz will be taken on Lulima prior to each lab related to that day's material. There is a Prelab Quiz information list in Lulima-Syllabus-Quizzes. Please review it before taking the quiz. You need to have computer access. You will have 72 hours prior to lab to take the quiz and have 10 minutes to complete it. There is no scheduled prelab quiz when a lab practical is scheduled.

LAB MANUAL and PHYSIOEX EXERCISES (200 points): Complete all lab manual exercises related to that week's activity to be checked off by the instructor and emailed. Do the same for PhysioEx 10.0 activities. Lab exercises need to be fully complete for full credit and turned in on time for a total of 200 points. Homework is typically due the following week, unless there is a holiday.

LAB NOTEBOOK (100 Points): Students are required to maintaining a lab notebook. A lab notebook is a separate composition book used to document experiments, draw microscopic images, and to keep track of valuable lab information. It will be checked at the at the last lab practical. For online, students will need to drop it off at Imiloa 103. There will be a box outside that you place your lab notebook in. Please be sure to have your name and class information. If you live at a distance and cannot turn it in, please videotape it slowly, upload to your drive, and share with me. Let me know before you do this!

ATTENDANCE (100 points): Attendance is mandatory. Each unexcused absence will result in a deduction of 5 points.

Final Grade:

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Tentative grades associated with semester exam scores are **only** to give a rough estimate of relative class standing, and are not used to determine the final grade

The standard grade scale will be used to determine your final grade. ($\geq 90\%$ =A, 80%-89%=B, 70%-79%=C, 60%-69%=D, $\leq 59\%$ =F)

ADDITIONAL INFORMATION

LAB ATTIRE, CONDUCT, AND HYGEINE (IN-PERSON LABS ONLY)

Because biology labs often involve working with chemicals or hazardous materials, students **MUST** wear close-toed shoes. In addition, some lab activities will require students to wear gloves and safety glasses (provided by the college). Several labs will involve body measurements (e.g., body fat), light exercise, or the placement of electrodes or sensors on the body. Students should therefore wear loose-fitting clothing that allows for a free range of movement (i.e. no tight-fitting pants or jeans). Students failing to dress appropriately for lab will not be permitted to participate in laboratory exercises and will be considered absent. Students engaged in conduct that threatens themselves or others in the lab will be refused access to the lab for the remainder of the semester and receive an "F" grade for the course.

LAB SUBJECT POLICY

Most labs involve non-invasive clinical measurements (e.g., skin-fold measurement, reflex tests, etc). **ALL** students are required to participate in these activities. If you have a health condition or other reason why you should not participate you should inform the instructor. Experiments involving invasive or semi-invasive procedures (e.g., finger sticks and urinalysis) will be performed on volunteers only.

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, royinouye@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:

UH CONFIDENTIAL ADVOCATE

UH Confidential Advocate

Phone: (808) 348-0663

Email: advocate@hawaii.edu

TITLE IX COORDINATOR

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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 121
- Phone: (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.

This Syllabus is subject to change, when appropriate.

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LAB SAFETY RULES (IN-PERSON LABS ONLY)

- 1) Be familiar with lab safety procedures and take appropriate precautions at all times to insure the safety of all lab students.
- 2) Follow all instructions carefully, especially when hazardous materials are being used.
- 3) Know the locations of important safety equipment: eyewash, safety shower, fire extinguisher, and first aid kit.
- 4) Report all injuries to the instructor immediately.
- 5) Dress appropriately for lab. Closed-toe shoes are required for ALL labs. Safety glasses and gloves are required for labs utilizing chemicals, bodily fluids, or hot-plates.
- 6) Report any hazardous conditions (e.g. chemical spills or broken glass) to the instructor immediately.
- 7) NO FOOD ALLOWED IN LAB
- 8) Chemicals used in lab may be poisonous, corrosive, or flammable. No chemicals, even those known to be safe, should be ingested or touched with un-gloved hands unless you are specifically directed to do so by your instructor.
- 9) Know how to safely operate all lab equipment and tools (e.g., microscopes, scalpels, and hematology supplies). Safe usage will be demonstrated by your instructor.
- 10) Clean all lab supplies and return them to their proper location before leaving lab.
- 11) Treat all organisms, living or dead, with care and respect. Use gloves when handling dissected specimens.
- 12) Place broken glass, sharps, and dissected specimens in the appropriate receptacles (NOT IN THE TRASH!)
- 13) Unless otherwise instructed, chemical wastes should NOT be disposed of down the drain.
- 14) Human tissues and bodily fluids (e.g., saliva and blood) must be disposed of in appropriate bio-hazard containers (NOT IN THE TRASH!).
- 15) Always remove gloves before touching clean surfaces: phone, computers etc..
- 16) Wash your hands immediately following each lab to reduce the possibility of contamination or infection. Wash hands with warm water and soap for 10-15 seconds after:
 - Handling any viable or potentially infectious material
 - Removing gloves before leaving lab