

BIOL 100: Human Biology

3 Credits CRN 64240

Online, Asynchronous

INSTRUCTOR: Ross Langston, PhD

OFFICE: Imiloa 115

OFFICE HOURS: by appointment via <u>Star Balance</u>

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EFFECTIVE DATE: Fall, 2024

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

Introduction to the structure and functions of cells, tissues, organs, and systems of the human body. Topics related to physical fitness, nutrition, health, and disease. Not intended for science majors. Students who have received credit for or are currently enrolled in ZOOL 101 may not receive credit for BIOL 100.

Activities Required at Scheduled Times Other than Class Times

None

STUDENT LEARNING OUTCOMES

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

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- 1. Use scientific reasoning to answer a question about phenomena in our natural universe or to determine the validity of a scientific claim.
- 2. Distinguish between living things and inanimate objects.
- 3. Relate cell structure and function to the architecture and functioning of the human body.
- 4. Use information about the form (anatomy) and function (physiology) of the human body to make effective decisions about human health.
- 5. Describe the interrelationships between humans and their environments.

COURSE CONTENT. (This section is optional)

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, citing specific examples when asked for. These principles include the following areas:

- Philosophy and characteristics of science and the scientific method
- Characteristics of living things and how living things differ from inanimate objects
- Chemical architecture of living things and the functions of the major groups of biological molecules
- Animal cells: the functions of their parts, how animal cells differ from plant and prokaryotic cells, cell metabolism and cell division
- Genetics and inheritance
- Human evolution, its mechanisms and history;
- Human nutritional requirements and the role of nutrition and fitness in human health
- Hierarchical architecture of the human body: molecules, cells, tissues, organs, organ systems, and whole organism;
- Anatomy and physiology of the systems that make up the human body, including skeletal, integumentary, muscular, circulatory, digestive, respiratory, excretory, nervous, endocrine, immune, and reproductive systems.

COURSE TASKS

- 1) Complete assigned readings, attend lectures, and take notes.
- 2) Complete in-class assignments.
- 3) Complete weekly quizzes.
- 4) Complete 4 class Exams

ASSESSMENT TASKS AND GRADING

EXAMINATIONS (400 points total- 100 points for each exam). The student will take four exams (non-cumulative) to demonstrate knowledge and understanding of information presented in the lectures, lecture outlines text readings, class activities, and study guides. The exam must be taken closed-book without any notes or study aids. You will be allowed to take the exam one time only. **NO RETAKES!**

QUIZZES (120 points- 10 points for each quiz). The student will take 14 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.

METHOD OF GRADING

GRADING SCALE

		Percentage	Grade
Exams	400 points	90-100	A
Quizzes	120 points	80-89	В
TOTAL	520 points	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.

LEARNING RESOURCES

Textbook: CK-12 College Human Biology (https://www.ck12.org/book/ck-12-human-biology/)

Course Website: Laulima.hawaii.edu

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

STUDENT RESPONSIBILITIES

The student is expected to attend lectures, participate in all course activities, and complete all examinations and course assignments on time. Please be considerate to other students by turning off cell phones during class. Any changes in the course schedule, such as examination dates, deadlines, etc., will be announced ahead of time on the course website. 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 for making an official withdrawal).

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 Kāko'o 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/

How to Succeed in BIOL 100

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 BIOL 100, 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-inthe-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.

My #1 Suggestion for success in this class: Take the 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!

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

Course Schedule

Week	DATE	TOPIC	TEXT	Assignment Due Friday 11 PM
1	8/26	Scientific Method Evaluating Claims	CH 1	Quiz 0, 1
2	9/2	Characteristics of Life	2, 9.2	Quiz 2
3	9/9	The Chemistry of Life Biological Molecules	3.1-3.2 3.3-3.7	Quiz 3
4	9/16	Cell Types and Cellular Organelles Membrane Transport	4.1-4.6 4.7-4.8	Quiz 4
5	9/23	Exam 1 Review		Exam 1
6	9/30	Cell Division Tissues	4.12-4.13	Quiz 5
7	10/7	Integumentary System Skeletal System	12 13.1-13.5;	Quiz 6
8	10/14	Muscle Physiology Joint Movements	13.6,14	Quiz 7
9	10/21	Exam 2 Review		Exam 2
10	10/28	Nervous System The Senses	10	Quiz 8
11	11/4	Endocrine System	11	Quiz 9
12	11/11	Cardiovascular System	16	Quiz 10
13	11/18	Exam 3 Review		Exam 3
14	11/25	Respiratory System	15	Quiz 11
15	12/2	Digestive System Nutrition	17 23	Quiz 12
16	12/9	Reproductive System	20	Quiz 13
17	12/16	Final Exam Review		Exam 4