

Biology 100: Human Biology

3 CR (CRN 63483) TR: 1:05-2:20 PM Kalaheo High School

INSTRUCTOR: Ross Langston, PhD

OFFICE: Imiloa 115

OFFICE HOURS: By appointment via Google Meet

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EFFECTIVE DATE: Fall, 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

Introduction to 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: Weekly quizzes must be taken at home and exams must be taken online while proctored by a teacher or your course instructor.

STUDENT LEARNING OUTCOMES

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

- 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

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 and view assigned lectures
- 2) Complete weekly quizzes.
- 3) 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 completed closed-book during class time.** 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 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 PARTICIPATION (80 points). Class participation will be assessed via class attendance and preparation as well as engagement in class discussions and lab activities. 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

GRADING SCALE

		Percentage	Grade
Exams	400 points	90-100	A
Quizzes	120 points	80-89	В
Class Participation	80 points	70-79	C
TOTAL	600 points	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

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).

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

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 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-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.

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!

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 ANS 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 Kākoʻo 110

Desrae Kahale, Mental Health Counselor & Confidential Resource

Phone: (808) 235-7393

Email: dkahale3@hawaii.edu Office: Hale Kākoʻo 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 on exams and plagiarism. See p. 15 of the 2018-2019 course catalog for a description of the College's policies concerning academic dishonesty.

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: Alakai 121 Phone: 808-235-7422 Email: wccaa@hawaii.edu

Biology 100 (CRN CRN 63484) FALL, 2022							
Week	DATE	TOPIC	TEXT	Lect	Assignment Due		
1	8/23	Scientific Method	CH 1	1.1	Quiz 1		
	8/25	Evaluating Claims		1.2			
2	8/30	Characteristics of Life	2, 9.2	2.1	Quiz 2		
	9/1	The Chemistry of Life	3.1-3.2	2.2	_		

3	9/6	Biological Macromolecules	3.3-3.7	3.1-3.2	Quiz 3
	9/08	Cell Types and Cellular Organelles	4.1-4.6	3.1 3.2	Quiz 3
4	09/13-	Membrane Transport/Exam Review	4.7-4.8	4.1	Quiz 4
	9/15	Exam 1 Review	1.7 1.0	1.1	Quiz
	9/16	Exam #1 (in class)			Exam 1
5	9/20	Cell Division	4.12-4.13	5.1	Quiz 5
	9/22	Tissues	9.3	5.2	
6	9/27	Integumentary System	12	6.1	Quiz 6
	9/29	Skeletal System	13	6.2	
	10/4-6	Fall Break			
7	10/11	Muscular System	14	7.1	Quiz 7
	10/13	Joint Movements	10.1-10.5	7.2	
8	10/18	Nervous System		7.3	
	10/20	Exam 2 Review			
	10/21	Exam #2 (in class)			Exam 2
9	10/25	The Senses	10.7	9.1	Quiz 8
	10/27	Endocrine System	11	9.2	
10	11/1	Blood	16	10.1	Quiz 9
	11/3	Heart and Blood Vessels		10.2	
11	11/8	Holiday: Election Day			Quiz 10
	11/10	Respiratory System	15	11.1	
12	11/15	Respiratory System Activity			
	11/17	Exam 3 Review			
	11/18	Exam #3 (in class)			Exam 3
13	11/22	Digestive System	17	13.1	Quiz 11
	11/24	Holiday: Thanksgiving	17		
14	11/29	Nutrition Activity			Quiz 12
	12/1	Urinary System	18	14.1	
15	12/6	Male Reproductive System	20-21	15.1	Quiz 13
	12/8	Female Reproductive System		15.2	
16	12/13	Exam 4 Review			
	12/15	Exam #4 (in class)			Exam 4