



UNIVERSITY of HAWAII®  
**WINDWARD**  
COMMUNITY COLLEGE

**BIOL 172 Introduction to Biology II**  
**3 Credits (CRN 60083)**  
**Online, asynchronous**

**INSTRUCTOR:** Mackenzie Manning  
**OFFICE HOURS:** By appt. [Zoom Office](#)  
**EMAIL:** [mmanning@hawaii.edu](mailto:mmanning@hawaii.edu)  
**EFFECTIVE DATE:** Spring 2025

**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 'ake akamai 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 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**

**Prerequisites:** Credit for BIOL 171

**Recommended Preparation:** Concurrent enrollment in BIOL 172L.

Continuation of BIOL 171. Topics include: Origin of eukaryotic organisms, their general characteristics, life cycles, systematics and evolution; Anatomy, physiology and classification of higher plants; Anatomy, physiology, behavior and classification of animals; and Basic ecological principles.

**STUDENT LEARNING OUTCOMES**

**After successfully completing this course, you will be able to:**

1. Describe the fundamental anatomy and physiology of protists, fungi and plants.
2. Describe the fundamental anatomy and physiology of animals.

3. Describe the relationship between animal form and function in terms of evolutionary history.
4. Describe the relationship between plant form and function in terms of evolutionary history.
5. Describe ecology, population biology, community ecology, and ecosystems ecology.

## COURSE TASKS

BIOL 172 is a 15-week, fully online course that will cover ~2 chapters of material per week. This course will be taught as an asynchronous course delivered through the Lamakū Learning Management System (LMS) and Pearson Mastering Biology platforms. Each week will consist of reading 2 chapters worth of material from your eBook, watching pre-recorded lectures, and completing online assignments through the Mastering Biology platform. Online quizzes covering 4-6 chapters will be due every 3-4 weeks. Discussion forums will be due every 3-4 weeks. Please see the tentative course schedule below for detailed information on the schedule of content and due dates.

## ASSESSMENT TASKS AND GRADING

### **Reading Assignments, Recorded Lectures:**

Two chapters per week will be covered. PowerPoints and pre-recorded lectures for each chapter will be available two weeks prior.

### **Mastering Biology Online Homework (30% of your final grade):**

There will be a total of 12 homework assignments. Each Mastering Biology Online Homework assignment (MB Hwk) will cover ~2 chapters and will be due at 11:59PM on Wednesday (see [schedule](#) below). Expect to spend on average ~2-3 hours for each assignment.

### **Dynamic Study Modules (15% of your final grade):**

Mastering Biology Dynamic Study Modules (DSMs) will be available for each chapter and are due by 11:59PM on Wednesday (see [schedule](#) below). These take approximately 30 minutes to complete per chapter.

### **Quizzes (50% of your final grade):**

There will be a total of five quizzes. Every 3-4 weeks you will have a quiz covering 4-6 chapters. Each quiz will be available for one week and will be due by 11:59PM on Sunday (see [schedule](#) below). These are 60 min timed, multiple choice quizzes that you will take on your own time on your computer (they are not proctored). You will access the quizzes through the Mastering Biology platform. Once you start the quiz, you cannot stop the timer so make sure that you are ready to take the quiz when you start it.

### **Forum Discussions (5% of your total grade):**

Every 3-4 weeks I will assign an online discussion activity to promote communication between you and your fellow online classmates. These will be short activities to stimulate thoughtful discussion and reflection and will require you to post and then reply to at least two other posts to get full credit. Forums will be due Wednesday by 11:59PM. No late submissions will be accepted.

## Evaluation and Feedback

All assignments, minus the forums, will be graded through Mastering Biology and grades will be made available upon submission. Grades will be updated after each quiz/exam using the Gradebook Classic tool in Lamakū and you will be notified when updates are completed.

### Late Work and Missed Assignments

Missed assignments, quizzes and exams will be granted a make up **ONLY** for legitimate and documented emergencies that are brought to the attention of the instructor within 24-hours after the due date for the assignment or quiz. If you think you might miss a due date, please contact me so we can work on a solution together.

### Required meeting with your instructor!

This semester, I want to meet with you at some point during the first three weeks of the semester, and again during the second half of the semester. These meetings will be no longer than 15 minutes and are a casual space for us to learn about one another. You can set up a zoom meeting with me in STAR BALANCE. Please do this right away! I look forward to chatting with you!

### Final Grade

Your final grade will be calculated based on the following:

Homework: 12 assignments	30%
Dynamic Study Modules: 23, equally weighted	15%
Quizzes: Five quizzes covering 4-6 chapters each	50%
Online discussion forums, equally weighted	5%

### ***Letter grades will be assigned as follows:***

- A 90% or above in total points
- B 80-89.9% of total points
- C 65-79.9% of total points
- D 55-64.9% of total points
- F Below 55% of total points or informal or incomplete official withdrawal from course.
- I Given at Instructor's discretion. See catalog for detailed description.
- W Official withdrawal from the course by **MARCH 28, 2025**

### LEARNING RESOURCES

1. Textbook: Urry, L., et al. Campbell Biology 12thEd. Benjamin/Cummings Publishing Co, 2021.
  - a. This is included in Mastering Biology, or you can purchase a hard copy of your own
2. PowerPoints and pre-recorded lectures will be available in Lamakū

## MASTERING BIOLOGY INSTRUCTIONS

In this course, BIOL 172, you will be using MasteringBiology™, an online tutorial and homework program that includes your eTextbook. This is automatically set up for you through the campus IDAP program. If you have an existing Pearson MyMastering Account, you can log in through the access tab in our Lamakū course. Detailed instructions can be found in this [document](#). For technical assistance try this [general support](#) page or this [contact support](#) page.

**NOT RECOMMENDED:** If you decide to opt-out of IDAP and lose access to the required digital course materials, please contact the bookstore for details: 808-235-7418  
[wccbooks@hawaii.edu](mailto:wccbooks@hawaii.edu)

## COURSE POLICIES

### Communication

I will communicate with you frequently through the Announcements and Email tools in Lamakū. Please be sure to check your UH email and the Lamakū Announcements list daily.

### Effort and Time

BIOL 172 is an intensive survey course of the study of biology that is appropriate for natural science majors and many health professions. The scope, breadth and depth of this foundational survey course is heavy and will require at a minimum 8+ hours of study and focus each week.

Sometimes students think that because of the flexibility of an online class, it will not require as much time as a face-to-face class. Actually, the exact opposite is true: an online class will take more time than a course in a traditional classroom. In this course, you need to spend time on your learning. **Most students will need 8-12 hours each week to learn what is necessary.** Please plan this time into your schedule, and plan to log in to the course multiple times each week.

### Participating in our Learning Community

Even though this is an online course, I encourage you to connect with your peers. We will also engage in a number of forums throughout the semester.

### Contacting the Instructor

If you have any questions or concerns about anything, please contact me via email: [Mackenzie Manning](#) I will respond to you as soon as I can within 24-hours. Please also feel free to drop in to my online Zoom office hours.

## 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

## TENTATIVE COURSE SCHEDULE

The following schedule is subject to change. Please consult the [Academic Calendar](#) for important dates throughout the term.

**All due dates/times are 11:59PM Hawaii Standard Time (HST)**

### **Week 1: Jan 13 Ch 28, 31 Protists and Fungi**

Chapter reading/powerpoint presentations

MB Hwk and DSMs: DUE Wed Jan 22

Forum 1: Wednesday, Jan 22

### **Week 2: Jan 20 Ch 32, 33 Animal Diversity and Invertebrates**

Chapter reading/powerpoint presentations

MB Hwk and DSMs: DUE Wed Jan 29

### **Week 3: Jan 27 Ch 34 Vertebrates**

Chapter reading/powerpoint presentations

MB Hwk and DSMs: DUE Wed Feb 5

### **Week 4: Feb 4**

Quiz 1 Ch: 28, 31, 33, 34 (Feb 3 - Feb 7)

### **Week 5: Feb 10 Ch 29, 30 Plant Diversity I and II**

Chapter reading/powerpoint presentations

MB Hwk and DSMs: DUE Wed Feb 19

### **Week 6: Feb 17 Ch 35, 36 Plant Structure and Transport**

Chapter reading/powerpoint presentations

MB Hwk and DSMs: DUE Wed Feb 26

Forum 2: Wednesday, Feb 26

### **Week 7: Feb 24 Ch 37, 38 Plant Nutrition and Reproduction**

Chapter reading/powerpoint presentations

MB Hwk and DSMs: DUE Wed Mar 5

### **Week 8: Mar 3**

Quiz 2 Ch: 29, 30, 35-38 (Mar 3 - Mar 7)

### **Week 9: Mar 10 Ch 40, 41 Animal Form/Function and Nutrition**

Chapter reading/powerpoint presentations

MB Hwk and DSMs: DUE Wed March 26

### **Week 10: Mar 17-21 SPRING BREAK**

### **Week 11: March 24 Ch 42, 44 Circulation/Gas Exchange and Osmoregulation/Excretion**

Chapter reading/powerpoint presentations

MB Hwk and DSMs: DUE Wed Apr 2

**Week 12: March 31**

Quiz 3 Ch: 40-42, 44 (Mar 31 - Apr 4)

**Week 13: April 7 Ch 45, 46 Endocrine System and Animal Reproduction**

Chapter reading/powerpoint presentations

MB Hwk and DSMs: DUE Wed April 16

Forum 3: Wednesday, April 16

**Week 14: April 14 Ch 43, 48 Immunity and Neurons, Synapses and Signaling**

Chapter reading/powerpoint presentations

MB Hwk and DSMs: DUE Wed April 23

**Week 15: April 21**

Quiz 4 Ch: 45, 46, 43, 48 (Apr 21 - Apr 25)

**Week 16: April 28 Ch 52, 53 Intro to Ecology and Population Ecology**

Chapter reading/powerpoint presentations

MB Hwk and DSMs: DUE Wed May 7

**Week 17: May 5 Ch 54, 55 Community and Ecosystems Ecology**

Chapter reading/powerpoint presentations

MB Hwk and DSMs: DUE Wed May 14

**Finals Week: May 12-16**

Quiz 5 Ch: 52-55 (May 12-16)

**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 the 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.

[Windward CC Student Conduct Information](#)

[UH System Student Conduct Policy EO 7.208](#)

Include an AI Statement (is it ok in your class? if so, when/how?) Here are some [UH AI Recommendations](#) and [AI Icons & Sample Statements](#). Instructors should refrain from sharing or inputting student work into online AI tools, including AI detection tools, without obtaining student consent. Uploading student work has potential FERPA implications as well as potential copyright concerns. Additionally, the uploaded content could be used as data for AI training without the student's consent.

**STUDENT RESPONSIBILITIES**

- Expectations

- Additional policies (e.g., cell phones in the classroom, late work, attendance, missed work, extra credit, participation, netiquette)
- Any information you feel the student needs to know
- Students may check the [Student Notifications](#) page on the website for canceled classes

## HOW TO SEEK ACADEMIC OR TECHNICAL SUPPORT

### Academic Support

- [Windward Community College Library](#)
- [Library eResources](#)
- [Ka Piko Writing Lab](#)
- [Ka Piko Speech Lab](#)
- [Ka Piko Math Lab](#)
- [Evening and Online Learning at Windward Community College](#)
- [STAR Balance](#)

### Technical Support

- [UH ITS Help Desk](#) – email [help@hawaii.edu](mailto:help@hawaii.edu) or call 956-8883 (or 1-800-558-2669) for Lamakū and most technology support. Available 24 hours a day, 7 days a week, including holidays.
- Student Tech Support - email [winhelp@hawaii.edu](mailto:winhelp@hawaii.edu), call 808-235-7437, or stop by in person at Hale La‘akea 228. Available Monday–Friday from 8:00 am–4:00 pm.
- Lamakū – Click on the [Lamakū Help](#) link in the menu bar at the top of the Lamakū homepage to fill out and submit a question and get your answer via email.
- [Information Security for Students](#)

## COLLEGE POLICIES & SUPPORT SERVICES

### Disabilities Accommodations Statement

The Windward Community College’s Disability Student Services Office (WCC-DSSO) is committed to providing equal access to qualified students with disabilities.

If you have a physical, sensory, health, cognitive, or mental health disability that could limit your ability to participate fully in this class, you are encouraged to contact the Disability Specialist Counselor, Roy Inouye, to discuss reasonable accommodations that will help you succeed in this class. The Disabilities Counselor can be reached at 808-235-7448, [wccdsso@hawaii.edu](mailto:wccdsso@hawaii.edu), or stop by the office (Hale Kako‘o 106) for more information.

### TRIO PROGRAM

The Federal TRiO Programs are educational opportunity outreach programs designed to motivate and support students from disadvantaged backgrounds. TRiO includes six outreach and support programs targeted to serve and assist low-income, first-generation college students and students with disabilities in progressing through the academic pipeline from middle school to post-baccalaureate programs. Here is their contact info: <https://windward.hawaii.edu/trio/>

## Basic Needs

Basic needs include food and housing, childcare, mental health, financial resources, and transportation. Student basic needs security is critical for ensuring strong academic performance, persistence and graduation, and overall student well-being. If you or someone you know is experiencing basic needs insecurity, please see the [UH System Basic Needs website](#).

## Mental Health Counseling

Mental Health and Wellness at Windward Community College counseling services and activities on campus to support students' life goals as well as their academic goals. Information about services can be found at the [WCC Mental Health & Wellness website](#).

## LGBTQ+

The University of Hawai'i system and Windward Community College are committed to building an inclusive community that supports and advocates for all Students, Staff, and Faculty. We welcome all members of our campus community to our campuses: transgender, māhū, and people of all gender identities. All members of our campus community deserve a work and educational environment free from harassment or bullying based on their sexual orientation, gender identity, or expression. University of Hawai'i Commission on LGBTQ+ Equality at their website: <http://www.hawaii.edu/offices/president/lgbtq/> Windward Community College Commissioner: Scott Sutherland, [scottjks@hawaii.edu](mailto:scottjks@hawaii.edu)

## UH Alerts

The UH Alert emergency notification system alerts the university community in the event of a natural, health or civil emergency. The information you provide will only be used in the event of an emergency that impacts the health and safety of the UH community or the closure of whole campuses. It will not be shared with others or used for routine UH communications or announcements. To sign up, visit [UH Alerts website](#) for more information.

## Financial Aid

If you are receiving financial aid and are contemplating not completing the course, BEFORE you withdraw, it is highly recommended that you contact the Financial Aid Office at 808-934-2712 or email them at [wccfao@hawaii.edu](mailto:wccfao@hawaii.edu) to discuss the impact this decision may have on your financial aid eligibility.

## Student Conduct Code

Windward Community College follows the University of Hawai'i Code of Student Conduct which defines expected conduct for students and specifies those acts subject to University sanctions. Students should familiarize themselves with the Code of Student Conduct since, upon enrollment at Windward Community College, the student has placed herself/himself under the policies and regulations of the University and its duly constituted bodies. The disciplinary authority is exercised through the Office of the Vice Chancellor for Student Affairs. Copies of the Student Conduct Code are available at the Office of the Vice Chancellor for Student Affairs or [online](#).



## Title IX - Sex Discrimination And Gender-Based Violence Resources

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) 341-4952  
Email: [advocate@hawaii.edu](mailto:advocate@hawaii.edu)  
Office: Hale Kāko'o 107 (Wednesdays)

Mykie E. Menor Ozoa-Aglugub, J.D., Title IX Coordinator  
Phone: (808) 235-7468  
Email: [mozoo@hawaii.edu](mailto:mozoo@hawaii.edu)  
Office: Hale Kāko'o 109

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

Karen Cho, Deputy Title IX Coordinator  
Phone: (808) 235-7404  
Email: [kcho@hawaii.edu](mailto:kcho@hawaii.edu)  
Office: Hale 'Alaka'i 120

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/](http://manoa.hawaii.edu/titleix/)