



UNIVERSITY of HAWAII®  
**WINDWARD**  
COMMUNITY COLLEGE

**BIOL 171 Introduction to Biology I**  
**3 Credits (CRN 61010, 61505)**  
**Online, asynchronous**

**INSTRUCTOR:** Mackenzie Manning  
**OFFICE:** 'Imiloa 121  
**OFFICE HOURS:** Tues 12pm - 1pm or by appt. [Zoom Office](#)  
**EMAIL:** [mmanning@hawaii.edu](mailto:mmanning@hawaii.edu)  
**EFFECTIVE DATE:** Fall 2023

**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**

*Recommended Preparation: High school chemistry or college chemistry and registration in BIOL 171L.*

First semester of introductory biology for all life science majors. Topics include: Overview of the science of biology; Cell structure, chemistry, growth, and reproduction; Classical, chromosomal and molecular genetics; Evolution, phylogeny and systematics; and Biology and diversity of viruses and bacteria.

**STUDENT LEARNING OUTCOMES**

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

1. Describe the fundamental biology of the cell, including cell anatomy, biochemical composition, cellular metabolism, respiration and photosynthesis, communication, growth and reproduction.
2. Describe the fundamentals of Mendelian genetics, the chromosomal and molecular basis of heredity and apply these concepts to the mechanisms of evolution.
3. Describe the process of DNA replication and DNA transcription and translation from gene to protein, including gene regulation and apply these processes to the reproduction and metabolism of the cell.
4. Describe the principles of evolution through natural selection, the principles of descent with modification, and the mechanisms involved in the evolution of populations and the origin of species.

5. Describe the history of life on Earth and the evolutionary relatedness of life on Earth through morphological and molecular phylogenies.
6. Describe the fundamental structure and function of viruses and bacteria.

## COURSE TASKS

BIOL 171 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 Lulima 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 four chapters will be due every other week. Discussion forums will be due every 3-4 weeks. There will be a midterm and a final, both covering ~12 chapters of material. 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 (20% of your final grade):*

There will be a total of 13 homework assignments. Each Mastering Biology Online Homework assignment will cover 2 chapters and will be due at 11:59PM on Tuesday (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 will be available for each chapter and are due by 11:59PM on Tuesday (see [schedule](#) below). These take approximately 30 minutes to complete per chapter.

### *Quizzes (30% of your final grade):*

There will be a total of six quizzes. Every two weeks you will have a quiz covering four chapters. Each quiz will be available for 48-hours and will be due by 11:59PM on Friday (see [schedule](#) below). These are 80 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.

### *Midterm and Final (30% of your final grade):*

The midterm and final will cover ~12 chapters each and will consist of a random pool of multiple choice questions taken from the quizzes. These will be 2 hour timed exams that you will take on your own time on your computer (they are not proctored). You will access them through the Mastering Biology platform. They will be available for 1-week and will be due by 11:59PM on Friday for Midterm and Thursday for the Final (see [schedule](#) below).

### *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 Lulima 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.

### Final Grade

Your final grade will be calculated based on the following:

Homework: 13 assignments	20%
Dynamic Study Modules: 24, equally weighted	15%
Quizzes: Six quizzes covering 4 chapters each	30%
Midterm and Final	30%
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 OCTOBER 30, 2023

### 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 Lulima

### MASTERING BIOLOGY INSTRUCTIONS

In this course, BIOL 171, 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 Lualima 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 Lualima. Please be sure to check your UH email and the Lualima Announcements list daily.

### Effort and Time

BIOL 171 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 Tues 12pm - 1pm HST, or by appt.

## 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](mailto:royinouy@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:

Jojo Miller, Confidential Advocate  
 Phone: (808) 348-0663  
 Email: [advocate@hawaii.edu](mailto:advocate@hawaii.edu)  
 Office: Hale Kāko'o 110

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/)

#### 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 fall term.

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

#### Week 1: Aug 21, Chapters 1 and 2

Chapter reading/powerpoint presentations

MB Hwk: Tuesday Aug 29

DSM: Tuesday Aug 29

Forum 1: Wednesday, Aug 30

#### Week 2: Aug 28, Chapters 3 and 4

Chapter reading/powerpoint presentations

MB Hwk: Tuesday, Sept 5

DSM: Tuesday, Sept 5

Quiz 1 Ch:1-4: Friday, Sept 8

#### Week 3: Sept 4, Chapters 5 and 6

Chapter reading/powerpoint presentations

MB Hwk: Tuesday, Sept 12

DSM: Tuesday, Sept 12

**Week 4: Sept 11, Chapters 7 and 8**

Chapter reading/powerpoint presentations

MB Hwk: Tuesday, Sept 19

DSM: Tuesday, Sept 19

**Quiz 2 Ch: 5-8: Friday, Sept 22**

**Week 5: Sept 18, Chapters 9 and 10**

Chapter reading/powerpoint presentations

MB Hwk: Tuesday, Sept 26

DSM: Tuesday, Sept 26

**Forum 2: Wednesday, Sept 27**

**Week 6: Sept 25, Chapters 12 and 13**

Chapter reading/powerpoint presentations

MB Hwk: Tuesday, Oct 3

DSM: Tuesday, Oct 3

**Quiz 3 Ch: 9, 10, 12, 13: Friday, Oct 5**

**Week 7: Oct 2, No new material, study for Midterm**

**Week 8: Oct 9, Midterm**

**Midterm Ch: 1-10, 12, 13: Available Oct 9 - 13. Due Friday, Oct 13**

**Week 9: Oct 16, Chapters 14 and 15**

Chapter reading/powerpoint presentations

MB Hwk: Tuesday, Oct 24

DSM: Tuesday, Oct 24

**Forum 3: Wednesday, Oct 25**

**Week 10: Oct 23, Chapters 16 and 17**

Chapter reading/powerpoint presentations

MB Hwk: Wednesday, Nov 1

DSM: Wednesday, Nov 1

**Quiz 4 Ch: 14-17: Saturday, Nov 4**

**Week 11: Oct 30, Chapters 18 and 19**

Chapter reading/powerpoint presentations

MB Hwk: Tuesday, Nov 7

DSM: Tuesday, Nov 7

**Week 12: Nov 6, Chapters 22 and 23**

Chapter reading/powerpoint presentations

MB Hwk: Tuesday, Nov 14

DSM: Tuesday, Nov 14

**Quiz 5 Ch: 18, 19, 22, 23: Friday, Nov 17**

**Week 13: Nov 13, Chapters 24 and 25**

Chapter reading/powerpoint presentations

MB Hwk: Tuesday, Nov 21

DSM: Tuesday, Nov 21

**Forum 4: Wednesday, Nov 22**

Week 14: Nov 20, Happy Thanksgiving! No new material this week

Week 15: Nov 27, Chapters 26 and 27

Chapter reading/powerpoint presentations

MB Hwk: Tuesday, Dec 5

DSM: Tuesday, Dec 5

Quiz 6 Ch: 24-27: Friday, Dec 8

Week 16: Dec 4, No new material, study for the final

Week 17: Dec 11, Finals Week

Final Ch: 14-19, 22-27: Available Dec 11 - Dec 15. Due Friday, Dec 15