



BIOL 1408.003I2
Biology for Non-Science Majors I
Spring 2025
Online through Brightspace/D2L (Lecture/Lab)

Instructor Information: Sheena Abernathy

E-mail: sabernathy@com.edu (preferred method of communication)

Office Telephone: (409)933-8330

Student hours and location:

Office Hours: Monday 10:00am-1:30pm, Tuesday 8:00am-9:30am, Wednesday 8:00am-9:00am (virtual), Thursday 8:00am-9:30am, Or by appointment

Virtual Student Hours: During all of my student hours I will be available in person or virtually. I will respond to emails as quickly as they come in and I am able to during those times. I will be available to meet with you through Microsoft Teams, but you will need to contact me ahead of time to schedule the meeting.

Office: STEM 325-39

Required Textbook, Materials, and Resources:

Required Textbooks

- *Campbell Essential Biology with Physiology*, Simon, Dickey, Hogan, and Reece e-text with Modified Mastering Biology. Pearson. Note: The e-book and Modified Mastering Biology are purchased at the time of registration and you will gain access to the online materials once you are in Brightspace/D2L when classes begin. You must have access to these resources to successfully complete this course.

Required Resources

Computer Requirements

It is your responsibility to have access to a computer with the following resources:

- Internet access through a wired Ethernet connection
- A contemporary web browser capable of viewing flash video (Chrome and Firefox usually work best)
- Java installed and updated
- COM e-mail account
- **Respondus Lockdown Browser and Monitor**
- **Webcam – either built in or separate device**
- Microsoft Office (COM offers free Office 365 access to students)
- A PDF reader

You are responsible for maintaining your own online access to the course. If your computer does not allow you to complete the assignments in the course, please use the computers available on campus. Be aware that the college computers are only available during the hours of operation for the computer labs and library. It is up to you to be aware of those times and get all assignments turned in on time.

Course Description:

Fundamental principles of living organisms will be studied, including physical and chemical properties of life, organization, function, evolutionary adaptation, and classification. Concepts of cytology, reproduction, genetics, and scientific reasoning are included Prerequisites TSIA2 945-990 ELAR/CRC test AND 5 or higher on Essay OR 910-944 on CRC with 5-6 on Diagnostic Test +5 or higher on Essay or [IRW 0320](#) with a grade of “C” or better.

Course Requirements:

MasteringBiology – you will have weekly assignments in MasteringBiology to be completed for credit. There are also assignments that are for practice and do not count towards your grade. These assignments can be completed to help prepare you for exams.

Chapter Study Guides – For each online module you will complete a chapter study guide. This study guide acts as both your “guided notes” as you read through the chapter and lecture slides, as well as a review for Lecture Exams and the Comprehensive Final Exam.

Lecture Exams and Comprehensive Final Exam – both lecture exams and the final exam will be taken in D2L and require Respondus Lockdown Browser and webcam. Exams may consist of multiple choice, T/F, diagram identification, and short answer style questions.

Lab Activities – you will be completing graded lab activities online through Mastering Biology. These labs will be what your lab exams are based off, so it is crucial that you complete the various lab activities.

Lab Practicals – lab practicals are exams that cover the various lab experiments that are carried out and will consist of multiple choice, fill-in-the-blank, short answer, and identification of results style questions. Lab practicals will be taken in D2L and require Respondus Lockdown Browser and webcam

Required Online Resources

- COM Brightspace/D2L: <http://com.brightspace.com>. COM Brightspace/D2L will be used for online activities and more. All of the class resources are available through Brightspace/D2L.
- Modified Mastering Biology with eText – **Login will be completed through Brightspace/D2L.** You will have several assignments on Mastering Biology for each topic covered.
- Respondus Lockdown Browser (available through Brightspace/D2L) and a webcam for Respondus Monitor

Determination of Course Grade/Detailed Grading Formula:

Lecture Grade:

1. Lecture exams (300 points) – A total of three lecture exams, each worth 100 points, will be given throughout the semester (see Tentative Course Outline).
2. Chapter Study Guides (105 points) – For each of the online modules, you will complete a Chapter Study Guide to be turned in via Brightspace/D2L. These study guides also serve as the review for exams.
3. Mastering Biology Activities (105 points) – you will have Mastering Biology Activities for each section of material covered in the Learning Modules.
4. Discussion Posts (80 points) – you will have various discussion posts in Brightspace/D2L to complete throughout the semester.
5. Comprehensive Final Exam (150 points)– covers ALL the material presented in lecture and assigned as reading throughout the semester.

Laboratory Grade:

1. Mastering Biology Lab (110 points) – each lab will have Mastering activities to be completed for your lab grade.
2. Lab Practical (150 points) – two lab practicals will be given during the semester covering material from previous labs.

Determination of Course Grade

Lecture Grade

Lecture exams	300 points
Chapter Study Guides	105 points
Mastering Biology Activities	105 points
Discussion Posts	80 points
Comprehensive Final Exam	150 points

Laboratory Grade

Mastering Biology Lab	110 points
Lab Practical	150 points

Grading Scale:

Final grades assigned for this course will be based on total points earned and are assigned as follows:

Letter Grade	Grade Average
A	89.5% - 100%
B	79.5% - 89.4%
C	69.5% - 79.4%
D	59.5% - 69.4%
F	0 – 59.4%

Lab Science Statement

The grade for this course consists of both a lecture and laboratory component. Students must earn a 70% or better in the laboratory component to successfully pass the course. Earning less than 70% in the laboratory component will result in an F for the course regardless of the lecture grade. Passing the laboratory component and failing the lecture component will not guarantee a passing grade for the course. Deviations from this policy will be at the sole discretion of the instructor.

A note about assignments listed in the Course Schedule:

- Assignments that can be found in Mastering Biology will be indicated with an “MB” beside them.
- Assignments that are in D2L will be indicated with a “D2L” beside them.

Late Work, Make-Up, and Extra-Credit Policy: Any deviations from the policies described below are at the sole discretion of the instructor.

Late Work Policy: The course is designed to accommodate some of life's mishaps, difficulties, or tragedies by providing extended deadlines for selected assignments. In those cases, there is a deadline extension after the initial deadline. After the extended deadline has passed, the assignment is closed, and the link may be removed. Expect that no additional time will be provided.

- MasteringBiology Activities and Labs have an extended deadline that results in a 15% loss of points for each day the assignment is late. After missing the initial deadline, the maximum grade is 85%. Please use the course outline to help schedule your time for the course to assure that you meet the assignment and assessment deadlines.
- Chapter Study Guides – have an extended deadline of typically one day (see course schedule) that will result in a 15% point reduction if submitted past the posted deadline.
- Discussion Board Posts have no extended deadline.
- Lecture Exams and Lab Practicals are an exception and have no extended deadline.

Make-Up Policy:

- MasteringBiology Activities, Chapter Study Guides, and Labs do not have a make-up policy due to the extended deadline.
- Discussion Board Posts: Ample time is given to complete the discussion board posts and there are no make-up opportunities offered.
- Lecture Exams: Ample time is given to complete the online exams and there are no make-up exams offered.
- Lab Practicals: Ample time is given to complete the online exams and there are no make-up exams offered.

Extra-Credit Policy: During the semester there will be opportunities for extra credit. Students are responsible for submitting any extra credit work by the due date and no late work for extra credit will be accepted.

Attendance Policy: Students are expected to actively participate in their online course. In order to be counted as present in the online portion of this course, you must log in at least **2 times per week** to participate in the class, complete assignments, print notes, or complete quizzes. This policy follows the attendance policies prescribed in the 2023-24 College Catalog (<http://coursecatalog.com.edu/>). Failing to log in to Brightspace/D2L, failing to log in to Mastering Biology, or failing to complete your work as scheduled demonstrates insufficient progress towards obtaining the course goals (objectives) and is detrimental to learning course material.

Communicating with your instructor: ALL electronic communication with the instructor must be through your COM email. Due to FERPA restrictions, faculty cannot share any information about performance in the class through other electronic means. Responses can be expected within 24 hours during the week or 48 hours if it is the weekend.

Student Learner Outcomes	Core Objectives	Course Level Assessments
1. Distinguish between prokaryotic, eukaryotic, plant and animal cells, and identify major cell structures.		
2. Identify stages of the cell cycle, mitosis (plant and animal), and meiosis.		
3. Interpret results from cell physiology experiments involving movement across membranes, enzymes, photosynthesis, and cellular respiration.	Empirical and Quantitative Skills	Lab Project
4. Apply genetic principles to predict the outcome of genetic crosses and statistically analyze results.		
5. Describe karyotypes, pedigrees, and biotechnology and provide an example of the uses of each.		
6. Identify the importance of karyotypes, pedigrees, and biotechnology.		
7. Identify parts of a DNA molecule, and describe replication, transcription, and translation.		
8. Analyze evidence for evolution and natural selection.	Critical Thinking	In class activity
9. Apply scientific reasoning to investigate questions, and utilize scientific tools such as microscopes and laboratory equipment to collect and analyze data.		
10. Use critical thinking and scientific problem-solving to make informed decisions in the laboratory.		
11. Communicate effectively the results of scientific investigations.	Communication	Lab Project
12. Students will demonstrate the ability to work effectively with others to support and accomplish a shared goal while recognizing and respecting	Teamwork	Lab Project

different viewpoints.		
-----------------------	--	--

Academic Dishonesty: Any incident of academic policy will be dealt with in accordance with college policy and the Student Handbook. Academic dishonesty – such as cheating on exams is an extremely serious offense and will result in a **grade of zero** on that exam and the student will be referred to the Office of Student Conduct for the appropriate discipline action.

Plagiarism: Plagiarism is using someone else’s words or ideas and claiming them as your own. Plagiarism is a very serious offense. Plagiarism includes paraphrasing someone else’s words without giving proper citation, copying directly from a website and pasting it into your paper, using someone else’s words without quotation marks. Any assignment containing any plagiarized material will receive a **grade of zero** and the student will be referred to the Office of Student Conduct for the appropriate discipline action.

Link(s) to resource(s) about avoiding plagiarism: <https://owl.english.purdue.edu/owl/resource/589/01/>

Student Concerns: If you have any questions or concerns about any aspect of this course, please contact me using the contact information previously provided. If, after discussing your concern with me, you continue to have questions, please contact Dean of Academic Programs, Dr. Barney at (409)933-8727 or rbarney@com.edu.

Online Classroom Conduct Policy: College of the Mainland requires that students enrolled at COM be familiar with the Standards of Student Conduct, which can be found in the on-line Student Handbook https://www.com.edu/student-services/docs/Student_Handbook_2024-2025_v2.pdf. Students are expected to be familiar with and abide by the Student Code of Conduct. Any violations of the Code of Conduct will result in a referral to the Dean of Students and may result in dismissal from this class.

<p>Course policies are subject to change. It is the student’s responsibility to check Brightspace/D2L for corrections or updates to the syllabus. Any changes will be posted in Brightspace/D2L.</p>

COURSE OUTLINE:

Week	Lecture Topics	Online Mastering Biology and D2L Assignments	Due Dates
1	Chapter 1 – Learning About Life Chapter 2 – Essential Chemistry for Biology	About Me Discussion Posting Intro to Mastering Biology How DSMs Work	Wed, 3/12
		Ch. 1/2 Activity (MB) Ch. 1/2 Study Guide (D2L) (<i>extended deadline 3/17</i>) Lab 1 – Scientific Method Interactive Lab (MB) Lab 2 – Acids and Bases Interactive Lab (MB) DB – Introspections #1 (D2L)	Sun, 3/16
SPRING BREAK			
2	Chapter 3 – The Molecules of Life Chapter 4 – A Tour of the Cell	Practice Quiz (D2L)	Wed, 3/26
		Ch. 3/4 Activity (MB) Ch. 3/4 Study Guide (D2L) (<i>extended deadline 3/31</i>) Lab 3 – Macromolecules Interactive Lab (MB) Lab 4 – Microscopy Interactive Lab (MB)) DB – The Working Cell (D2L)	Sun, 3/30
3	Chapter 5 – The Working Cell Chapter 6 – Cellular Respiration	Exam 1 (Chapter 1-3) (D2L)	Wed, 4/2
		Ch. 5/6 Activity (MB) Ch. 5/6 Study Guide (D2L) (<i>extended deadline 4/7</i>) Lab 5 – Cells Interactive Lab (MB) Lab 6 – Diffusion and Osmosis Interactive Lab (MB) DB – Enzymes (D2L)	Sun, 4/6
4	Chapter 7 – Photosynthesis Chapter 8 – Cellular Reproduction	Lab Practical 1 (Labs 1-6) (D2L) DB – Introspections #2 (D2L)	Wed, 4/9
		Ch. 7/8 Activity (MB) Ch. 7/8 Study Guide (D2L) (<i>extended deadline 4/14</i>) Lab 7 – Enzymes Interactive Lab (MB) Lab 8 – Photosynthesis Interactive Lab (MB)	Sun, 4/13
5	Chapter 9 – Patterns of Inheritance	Exam 2 (Chapter 4-7) (D2L)	Wed, 4/16
		Ch. 9 Activity (MB) Ch. 9 Study Guide (D2L) (<i>extended deadline 4/22</i>) Lab 9 – Mitosis Interactive Lab (MB) DB – Genetics (D2L)	Mon, 4/21
6	Chapter 10 – The Structure and Function of DNA Chapter 12 – DNA Technology	Ch. 10/12 Activity (MB) Ch. 10/12 Study Guide (D2L)(<i>extended deadline 4/28</i>) Lab 10 – Genetics Interactive Lab (MB) DB – DNA/Biotechnology (D2L)	Sun, 4/27
7	Chapter 13 – How Populations Evolve	Ch. 13 Activity (MB) Ch. 13 Study Guide (D2L) (<i>extended deadline 5/5</i>) Lab 11 – Natural Selection Interactive Lab (MB) DB – Introspections Week 7 (D2L)	Sun, 5/4
8		Exam 3 (Chapter 8-10, 13) (D2L) Lab Practical 2 (Labs 7-11) (D2L)	Mon, 5/5
		Comprehensive Final Exam	Wed, 5/7

Institutional Policies and Guidelines

Grade Appeal Process: Concerns about the accuracy of grades should first be discussed with the instructor. A request for a change of grade is a formal request and must be made within six months of the grade assignment. Directions for filing an appeal can be found in the student handbook [https://www.com.edu/student-services/docs/Student Handbook 2024-2025 v2.pdf](https://www.com.edu/student-services/docs/Student_Handbook_2024-2025_v2.pdf). *An appeal will not be considered because of general dissatisfaction with a grade, penalty, or outcome of a course. Disagreement with the instructor's professional judgment of the quality of the student's work and performance is also not an admissible basis for a grade appeal.*

Academic Success & Support Services: College of the Mainland is committed to providing students the necessary support and tools for success in their college careers. Support is offered through our Tutoring Services, Library, Counseling, and through Student Services. Please discuss any concerns with your faculty or an advisor.

ADA Statement: Any student with a documented disability needing academic accommodations is requested to contact:

Kimberly Lachney, Student Accessibility Services Coordinator

Phone: 409-933-8919

Email: AccessibilityServices@com.edu

Location: COM Doyle Family Administration Building, Student Success Center

Textbook Purchasing Statement: A student attending College of the Mainland is not under any obligation to purchase a textbook from the college-affiliated bookstore. The same textbook may also be available from an independent retailer, including an online retailer.

Withdrawal Policy: Students may withdraw from this course for any reason prior to the last eligible day for a "W" grade. Before withdrawing students should speak with the instructor and consult an advisor. Students are permitted to withdraw only six times during their college career by state law. The last date to withdraw from the 1st 8-week session is February 26. The last date to withdraw from the 16-week session is April 21. The last date to withdraw for the 2nd 8-week session is April 30.

FN Grading: The FN grade is issued in cases of *failure due to a lack of attendance*, as determined by the instructor. The FN grade may be issued for cases in which the student ceases or fails to attend class, submit assignments, or participate in required capacities, and for which the student has failed to withdraw. The issuing of the FN grade is at the discretion of the instructor. The last date of attendance should be documented for submission of an FN grade.

Early Alert Program: The Student Success Center at College of the Mainland has implemented an Early Alert Program because student success and retention are very important to us. I have been asked to refer students to the program throughout the semester if they are having difficulty completing assignments or have poor attendance. If you are referred to the Early Alert Program you will be contacted by someone in the Student Success Center who will schedule a meeting with you to see what assistance they can offer in order for you to meet your academic goals.

Resources to Help with Stress:

If you are experiencing stress or anxiety about your daily living needs including food, housing or just feel you could benefit from free resources to help you through a difficult time, please click here <https://www.com.edu/community-resource-center/>. College of the Mainland has partnered with free community resources to help you stay on track with your schoolwork, by addressing life issues that get in the way of doing your best in school. All services are private and confidential. You may also contact the Dean of Students office at deanofstudents@com.edu or communityresources@com.edu.

Nondiscrimination Statement:

The College District prohibits discrimination, including harassment, against any individual on the basis of race, color, religion, national origin, age, veteran status, disability, sex, sexual orientation, gender (including gender identity and gender expression), or any other basis prohibited by law. Retaliation against anyone involved in the complaint process is a violation of College District policy.