



BIOL 1408.001IN
Biology for Non-Science Majors I
Fall I 2024
Online through Brightspace/D2L (Lecture/Lab)

Instructor Information:

Emilie Mobley

Email: emobley@com.edu

phone: 832-848-0719

Email is the preferred method of communication. Responses can be expected within 24 hours during the week or within 48 hours during the weekends.

Student hours and location:

Virtual Student Hours: Tuesdays and Thursdays 9:30-12, or by appointment

During virtual student hours I will respond to emails as quickly as they come in. 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.

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.

Required Resources

Computer Requirements

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

- Reliable Internet Access
- 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: CPT Reading 78/READ 0370. Successful completion of College Algebra or better-level mathematics is recommended.

Course Requirements:

Chapter Study Guides — For each chapter of the textbook, you will complete the corresponding 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.

MasteringBiology Assignments – Throughout the course, you will complete various assignments in Mastering Biology, including review activities, interactive labs, and bonus practice quizzes. There are also optional assignments called DSMs (Dynamic Study Modules) that are for practice and do not count towards your grade. *MB Activities and Interactive Labs allow for 2 attempts so that you can improve your score.*

Lecture Exams and Comprehensive Final Exam – The 3 lecture exams and the comprehensive final exam cover content from the textbook chapters and will consist of multiple choice, T/F, diagram identification, and short answer style questions.

Lab Practicals – The 3 lab practicals are exams that cover the interactive labs that are carried out and will consist of multiple choice, fill-in-the-blank, short answer, and identification of results style questions.

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. Introductory Items (20 points)- These short easy activities get you acquainted with D2L and Mastering Biology: Introduction to Mastering Biology, Introduction to DSMs, and the Practice Exam.
2. Chapter Study Guides (120 points) – For each chapter covered in the textbook/lecture slides, you will complete a Chapter Study Guide to be turned in via Brightspace/D2L. These study guides act as both “guided notes” and as the review for lecture exams.
3. Mastering Biology Activities (75 points) – For each unit of material covered, there is a respective Activity in Mastering Biology. These assignments are intended to be review, and present the material in new ways (such as videos, audio podcasts, and visual diagrams). These assignments can be open book/open note.
4. Discussion Posts (50 points) – you will have various discussion posts in Brightspace/D2L to complete throughout the semester.
5. Lecture exams (300 points) – You will have three lecture exams, each worth 100 points. The lecture exams cover content from the textbook chapters, study guides and activities. ***These exams do not allow for notes or “cheat sheets.”***
6. Comprehensive Final Exam (150 points)– covers ALL the material presented in lecture and assigned as reading throughout the semester. ***This exam does not allow for notes or “cheat sheets.”***

Laboratory Grade:

1. Mastering Biology Lab (110 points) – you will complete 11 interactive labs within Mastering Biology. These labs correspond to many topics covered in lecture while also helping you virtually “experience” what laboratory scientists do.
2. Lab Practical (150 points) – three lab practicals, each worth 50 points, will be given during the semester. These exams exclusively cover material from previous labs (see tentative course outline). ***These exams do not allow for notes or “cheat sheets.”***

Determination of Course Grade

Lecture Grade (~75% of total grade)

Introductory Items (3, various point values)	20 points
Chapter Study Guides (12*10)	120 points
Mastering Biology Activities (3*25)	75 points
Discussion Posts (5, various point values)	50 points
Lecture exams (3*100)	300 points
Comprehensive Final Exam (1)	150 points

Laboratory Grade (~25% of total grade)

Mastering Biology Labs (11*10)	110 points
Lab Practical (3*50)	150 points

Total:

975 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 earn a passing grade (C or higher) in the course overall.** 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.

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.

- Chapter Study Guides, MasteringBiology Activities, and Labs have an extended deadline that results in a 10% loss of points for each day that the assignment is late. Please use the course outline to help schedule your time for the course to assure that you meet the assignment deadlines.
- Discussion Post responses can be emailed to the instructor after the deadline for a maximum of half credit. If the post required commenting on other students' posts, those points cannot be earned after the deadline.
- Lecture Exams and Lab Practicals are an exception and have no extended deadline.

Make-Up Policy:

- MasteringBiology Activities, and Labs do not have a make-up policy due to the extended deadline.
- 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. Examples include study guide corrections, practice quizzes, and extra optional assignments. 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 **2-3 time per week** to participate in the class, complete assignments, print notes, or complete quizzes. This policy follows the attendance policies prescribed in the 2023-2024 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.		Lecture Exam, Lab Practical
2. Identify stages of the cell cycle, mitosis (plant and animal), and meiosis.		Lecture Exam, Lab Practical
3. Interpret results from cell physiology experiments involving movement across membranes, enzymes, photosynthesis, and cellular respiration.	Empirical and Quantitative Skills	Lecture Exam, Lab Practical
4. Apply genetic principles to predict the outcome of genetic crosses and statistically analyze results.		Lecture Exam, Lab Practical
5. Describe karyotypes, pedigrees, and biotechnology and provide an example of the uses of each.		Lecture Exam, Lab Practical
6. Identify the importance of karyotypes, pedigrees, and biotechnology.		Discussion Posts
7. Identify parts of a DNA molecule, and describe replication, transcription, and translation.		Lecture Exam, Lab Practical
8. Analyze evidence for evolution and natural selection.	Critical Thinking	Lecture Exam, Lab Practical
9. Apply scientific reasoning to investigate questions, and utilize scientific tools such as microscopes and laboratory equipment to collect and analyze data.		Lab Practical
10. Use critical thinking and scientific problem-solving to make informed decisions in the laboratory.		Lab Practical, Discussion Posts
11. Communicate effectively the results of scientific investigations.	Communication	Discussion Posts
12. Students will demonstrate the ability to work effectively with others to support and accomplish a shared goal while recognizing and respecting different viewpoints.	Teamwork	Discussion Posts

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 Sheena Abernathy at sabernathy@com.edu or 409-833-8330.

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. <http://www.com.edu/student-services/student-handbook.php>. 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.

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.

The course calendar is also available via this link: <https://docs.google.com/spreadsheets/d/18z2KOn42oghqm1GLhld8xGSZpklonJqWqXf0aW5wUY/edit?usp=sharing>

You can make your own editable copy of the course calendar by:

1. Open the file using the link above
2. Click “file” (top left corner)
3. Select “Make A Copy”
4. Enter a name for the copy and choose where to save it
5. Click “OK”

Dates	Chapters Covered	Required Assignments	Summative Assignments	Optional Assignments
Weeks 1-2 Monday, August 19 - Sunday, September 1	<p>Course Introduction</p> <p>Chapter 1- Biology Today</p> <p>Chapter 2- Essential Chemistry for Biology</p> <p>Chapter 3- The Molecules of Life</p> <p>Chapter 4- A Tour of the Cell</p>	<p>Due Wednesday, August 21:</p> <ul style="list-style-type: none"> - Introduction to Mastering Biology - Introduction to DSMS - About Me Discussion Post - Practice Exam <p>Due Friday, August 30:</p> <ul style="list-style-type: none"> - Chapter 1 Study Guide - Scientific Method Interactive Lab - Chapter 2 Study Guide - Acids and Bases Interactive Lab - Chapter 3 Study Guide - Macromolecules Interactive Lab - Chapter 4 Study Guide - Microscopy Interactive Lab <p>Due Friday, September 20:</p> <ul style="list-style-type: none"> - Chapter 5 Study Guide - Cells Interactive Lab - The Working Cell Discussion Post - Chapter 6 Study Guide - Diffusion and Osmosis Interactive Lab - Chapter 7 Study Guide - Enzymes Interactive Lab - Chapter 8 Study Guide - Photosynthesis Interactive Lab 	<p>Due Sunday, September 1:</p> <ul style="list-style-type: none"> - Chapters 1-4 Activity - Week 2 Check-In Discussion Post - Lecture Exam 1 - Lab Practical 1 	<ul style="list-style-type: none"> - Chapter DSMS - Colored and Labeled Cells (Chapter 4) - Practice Quiz 1 - Chapter Study Guide Corrections
Weeks 3-5 Tuesday, September 3 - Sunday, September 22	<p>Chapter 5- The Working Cell</p> <p>Chapter 6- Cellular Respiration</p> <p>Chapter 7- Photosynthesis</p> <p>Chapter 8- Cellular Reproduction</p>	<p>Due Friday, October 4:</p> <ul style="list-style-type: none"> - Chapter 9 Study Guide - Mitosis Interactive Lab - Chapter 10 Study Guide - Genetics Interactive Lab - Chapter 12 Study Guide - Biotechnology Discussion Post - Chapter 13 Study Guide - Natural Selection Interactive Lab <p>Due Friday, September 22:</p> <ul style="list-style-type: none"> - Chapters 5-8 Activity - Week 5 Check-In Discussion Post - Lecture Exam 2 - Lab Practical 2 	<p>Due Sunday, October 6:</p> <ul style="list-style-type: none"> - Chapters 9-13 Activity - Week 7 Check-In Discussion Post - Lecture Exam 3 - Lab Practical 3 	<ul style="list-style-type: none"> - Chapter DSMS - Punnett Square Practice (Chapter 9) - Protein Synthesis Practice (Chapter 10) - Practice Quiz 3 - Chapter Study Guide Corrections - Course Survey
Weeks 6-7 Monday, September 23 - Sunday, October 6	<p>Chapter 9- Patterns of Inheritance</p> <p>Chapter 10- The Structure and Function of DNA</p> <p>Chapter 12- DNA Technology</p> <p>Chapter 13- How Populations Evolve</p>	<p>Due Wednesday, October 9:</p> <ul style="list-style-type: none"> - Any missing required assignments - Any optional/extra credit assignments - Any interactive lab re-takes 	<p>Due Wednesday, October 9:</p> <ul style="list-style-type: none"> - Comprehensive Final Exam 	
Week 8 Monday, October 7 - Wednesday, October 9	No new material			

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. *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 October 2. The last date to withdraw from the 16-week session is November 15. The last date to withdraw for the 2nd 8-week session is November 26.

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.