BIOL 1408.004I2
Biology for Non-Science Majors I
Spring 2025
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: 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:
Chapter Study Guides — For each week of content, you will complete a study guide covering the relevant textbook chapters. 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 and virtual labs. There are also extra credit assignments called DSMs (Dynamic Study Modules) that are a great review tool for each chapter. *MB Activities and Virtual Labs allow for 2 attempts so that you can improve your score.*
Discussion Posts — Once a week you will write a discussion board post in D2L. The topics for each discussion board range from more self-reflective topics to content-related extensions.
Lecture Exams and Comprehensive Final Exam – The 2 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 2 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 (25 points)- These short easy activities get you acquainted with D2L and Mastering Biology: Introduction to Mastering Biology, Introduction to DSMs, About Me discussion post, and the Practice Exam.
2. Study Guides (100 points) – For each week of content, you will complete a study guide covering the relevant textbook chapters 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 (100 points) – For each week 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, visual diagrams, and articles). These assignments can be open book/open note.
4. Discussion Posts (95 points) – you will have various discussion posts in Brightspace/D2L to complete throughout the semester.
5. Lecture exams (200 points) – You will have two 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. Virtual Labs (100 points) – you will complete 10 labs in Mastering Biology. These labs correspond to many topics covered in lecture while also helping you virtually "experience" what laboratory scientists do.
2. Lab Practicals (150 points) – two lab practicals, each worth 75 points, will be given during the semester. These exams exclusively cover material from previous labs (see tentative course calendar). ***These exams do not allow for notes or "cheat sheets."***

Determination of Course Grade

Lecture Grade (~75% of total grade)	
Introductory Items (4, various point values)	25 points
Study Guides (5*20)	100 points
Mastering Biology Activities (5*20)	100 points
Discussion Posts (7, various point values)	95 points
Lecture exams (2*100)	200 points
Comprehensive Final Exam (1*150)	150 points
Laboratory Grade (~25% of total grade)	
Mastering Biology Labs (10*10)	100 points
Lab Practicals (2*75)	150 points
Total:	**920 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 **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.

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.

TENTATIVE Course Calendar:

Week	Lecture Topics	Online Mastering Biology and D2L Assignments	Due Date
1	**Introductory Activities**	DB — About Me (D2L) Practice Exam (D2L) Introduction to Mastering Biology (MB) Introduction to DSMs (MB)	3/12
	Chapter 1 – Learning About Life **Chapter 2** – Essential Chemistry for Biology	Ch. 1-2 Activity (MB) Week 1 (Ch. 1-2) Study Guide (D2L) Lab 1 – Scientific Method Interactive Lab (MB) Lab 2 - Acids and Bases Interactive Lab (MB) DB – Introspections Week 1 (D2L)	3/16
		SPRING BREAK - NO CLASSES	3/17-3/21
2	**Chapter 3** – The Molecules of Life **Chapter 4** – A Tour of the Cell	Ch. 3-4 Activity (MB) Week 2 (Ch. 3-4) Study Guide (D2L) Lab 3 – Macromolecules Interactive Lab (MB) Lab 4 – Microscopy Interactive Lab (MB) DB – Cell Function Analogy	3/30
3	**Chapter 5** – The Working Cell **Chapter 6** – Cellular Respiration: Obtaining Energy from Food **Chapter 7** – Photosynthesis: Using Light to Make Food	Ch. 5-7 Activity (MB) Week 3 (Ch. 5-7) Study Guide (D2L) Lab 5 – Diffusion and Osmosis Interactive Lab (MB) Lab 6 – Enzymes Interactive Lab (MB) DB – Energy Transformation Diversity	4/6
4		Exam 1 (Chapters 1-7) Lab Practical 1 (Labs 1-6) DB – Introspections Week 4 (D2L) *Extra Credit- DSMs for Chapters 1, 2, 3, 4, 5, 6, 7*	4/13
5	**Chapter 8** – Cellular Reproduction: Cells from Cells **Chapter 9** – Patterns of Inheritance	Ch. 8-9 Activity (MB) Week 5 (Ch. 8-9) Study Guide (D2L) Lab 7 – Photosynthesis Interactive Lab (MB) Lab 8 – Mitosis Interactive Lab (MB) DB — Henrietta Lacks and the Immortal HeLa Cell Line ****NOTE: 4/18 is Good Friday****	4/20
6	**Chapter 10** – The Structure and Function of DNA **Chapter 12** – DNA Technology **Chapter 13** – How Populations Evolve	Ch. 10-13 Activity (MB) Week 6 (Ch. 10, 12, 13) Study Guide (D2L) Lab 9 – Genetics Interactive Lab (MB) Lab 10 – Natural Selection Interactive Lab (MB) DB – Biotechnology	4/27
7		Exam 2 (Chapter 8-13) Lab Practical 2 (Labs 7-10) DB – Introspections Week 7 (D2L) *Extra Credit- DSMs for Chapters 8, 9, 10, 12, 13* ***NOTE: 4/30 is W-day***	5/4
8		**Comprehensive (Ch. 1-13) Final Exam — Due 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.** *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.