BIOL 1408.201HY
Biology for Non-Science Majors I
Spring 2022
Online through Blackboard (Lecture)
T 6-8:50, League City Room143 (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 and Wednesday 8:10-9:30 and 1:50-2:30, Tuesday 10-12:30 and 5:30-6pm (at League City Lab), Thursday 10-12:30, Or by appointment
Office: STEM 325-28

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 Blackboard when classes begin.
- *BIOL 1406/8 Lab Manual* – purchased through the COM Bookstore

Required Materials
- Scantrons (5) – 882E (bring with you to your exams!!)

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:
Lectures/Labs – each week we will be covering material during class time and this material will involve lecture and/or lab each day.
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.
In class work/homework – throughout the semester we will have various in class activities that are linked to the course material to help reinforce the information covered in lecture.
Lecture Exams and Comprehensive Final Exam – both lecture exams and the final exam will be taken during class time and will consist of multiple choice, T/F, diagram identification, and short answer style questions.
Lab Activities – you will be completing lab activities in class, and these are graded activities. These labs will be what your lab exams are based off, so it is crucial that you attend lab to complete the various lab activities.
Lab Reports – during the semester, you will have lab reports that are due for specific lab activities. You must attend the lab that the report is based off in order to receive credit for the lab report.
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.

Required Online Resources
- COM Blackboard: https://de.com.edu/webapps/login/. COM Blackboard will be used for online activities and more. Many class resources will be available through Blackboard. Training is required to access Blackboard. If you have any questions regarding course access/training, please contact the Distance Education department at extension 8476.
- Modified Mastering Biology with eText – **Login will be completed through Blackboard.** You will have several assignments on Mastering Biology for each topic covered.
- Respondus Lockdown Browser and a webcam for Respondus Monitor

Computer Requirements
You will need 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.

Determination of Course Grade/Detailed Grading Formula:

Lecture Grade (715 points):

1. Lecture exams (400 points) – A total of four lecture exams, each worth 100 points, will be given throughout the semester during the face-to-face lab period (see Tentative Course Outline).
2. Chapter Study Guides (55 points) – For each of the online modules, you will complete a Chapter Study Guide to be turned in via Blackboard. These study guides also serve as the review for exams.
3. Mastering Biology (110 points) – you will have various Mastering Biology homework assignments each week of the semester that cover topics discussed in the Learning Modules.
4. Comprehensive Final Exam (150 points)– covers ALL the material presented in lecture and assigned as reading throughout the semester.

Laboratory Grade (250 points):

1. Lab Daily Grade (60 points) – each lab will have activities to be completed for a portion of your lab daily grade.
2. Lab Practical (150 points) – two lab practicals will be given during the semester covering material from previous labs.
3. Lab Project (40 points) – a lab project regarding the enzyme, cell respiration, photosynthesis, and osmosis experiments will be assigned during the semester, worth 35 points. This Lab Project will be a group project and you will be graded on your participation and teamwork, in addition to the lab project itself.

Determination of Course Grade

Lecture Grade (76%)	
Lecture exams	400 points
Chapter Study Guides	55 points
Mastering Biology Homework	110 points
Comprehensive Final Exam	150 points
Laboratory Grade (24%)	
Lab Daily Grade	60 points
Lab Project	40 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.

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 Assignments have an extended deadline that results in a 10% loss of points for the late assignment. After missing the initial deadline, the maximum grade is 90%. The extended deadlines are listed in the course outline. Please use the course outline to help schedule your time for the course to assure that you meet the assignment and assessment deadlines.
- Lecture Exams, Lab Report, and Lab Practicals are an exception and have no extended deadline.
- Labs will be due on the day they are completed in class. Students that are not in class will not be allowed to complete the activity.
- In class work/homework if work is given during class to be completed in class, there is no extended deadline and students that are not in class will not be allowed to complete the activity. If homework is assigned, students will have ample time to complete the work and no extended deadlines are provided.

Make-Up Policy:

- MasteringBiology Assignments do not have a make-up policy due to the extended deadline.
- Lecture Exams: Should you anticipate an absence on an exam day you must contact your instructor by phone, email or in person PRIOR to the absence. Your situation will be evaluated by your instructor and you may be allowed to take a make-up exam. Make-up exams will be allowed for a death in the family or a documented student illness. You must provide legitimate proof for your excuse in the case of missing an exam. The make-up exam MUST be taken within one week of the original exam date. Missed exams will not be allowed without documented evidence.
- Lab Report: you will have ample time to complete the lab report and no make-up work will be accepted.
- Lab Practicals: Due to the nature of the course, no make-up Lab Practical will be permitted.
- Labs: There are NO MAKE-UP LABS. Arriving late to lab may result in not receiving full credit for completing the lab. You are still responsible for the material covered in lab and it is YOUR responsibility to obtain the information from a classmate.
- In class work/homework If you miss class on the day an assignment is due, you will receive a ZERO for the missed assignment. To prevent a grade of ZERO, you can scan and email the assignment to your instructor on the same day the assignment is due. If you are absent for an in-class assignment, there are no make-ups, and you will receive a ZERO for the in-class work.

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 2018-2019 College Catalog (http://coursecatalog.com.edu/). Failing to log in to Blackboard, 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.

Laboratory Attendance Policy: This laboratory is designed to support the information provided by the lectures and online materials. This lab course is an introduction to fundamental biology, that covers important topics in each lab meeting. Labs are designed to last most of the lab period, therefore expect to be in lab for the full time. Arriving late to lab may result in not receiving full credit for completing the lab. You are responsible for the material covered in lab and it is YOUR responsibility to obtain any notes from a classmate. **Attendance:** Lab attendance and participation are required and directly affect your weekly lab grade. Any deviations from this policy are at the sole discretion of the instructor.

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:

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 different viewpoints.	Teamwork	Lab Project

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.

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/student-handbook.html . Students should act in a professional manner at all times. Disruptive students will be held accountable according to college policy. Any violations of the Code of Conduct will result in a referral to the Office for student Conduct and may result in dismissal from this class.

Behavioral Expectations Each student is entitled to an environment conducive to learning. Any situation that prevents students from learning or the instructor from teaching is considered to be a disruption. Please be respectful of your fellow students and the instructor by adhering to the following:

1. Cell phones can be used sparingly during class, but if the use begins to be a disruption to yourself, other students, or the instructor, you will be asked to put the device away. Certain devices can be used to view content on the internet; however, this is at the discretion of the instructor. Laptops are ONLY permitted during class to take notes. Surfing the internet or checking email from your laptop is not permitted. ***During exams, no electronics will be allowed out. Items not allowed include, but are not limited to, cell phones, laptops, tablets, ear buds, headphones. If the student has any of these devices out during an exam, the exam will be taken from the student, and they will receive a zero for that exam.***
2. Students can be removed from the class if they are exhibiting disruptive behavior as deemed by the instructor. Repeated incidents will result in automatic withdrawal from the class. Students who display this conduct will be removed from the class and a Conduct Referral Form may be submitted to the Dean of Students.

Course policies are subject to change. It is the student's responsibility to check Blackboard for corrections or updates to the syllabus. Any changes will be posted in Blackboard.

Spring 2022 Tentative Course Outline: NOTE- **LAB DAYS (EVERY TUESDAY) ARE SHADED AND IN BOLD**

Week	Dates	Activities
1	**Tue, 1/18**	SPRING SEMESTER BEGINS – Review Read me First, Blackboard, and Syllabus Begin Reviewing Module 1: Chapter 1 Introduction: Biology Today **IN LAB – Introduction to Course**
	Wed, 1/19	About Me Discussion Board Posting, Introduction to Mastering Biology, and How DSMs Work Due
	Fri, 1/21	Module 1 HW: Chapter 1 Due (Extended Deadline 1/23) Chapter 1 Study Guide Due (Extended Deadline 1/23)
2	Mon, 1/24	Begin Reviewing Module 2: Chapter 2 Essential Chemistry for Biology
	Tue, 1/25	**IN LAB: Lab 1 – Scientific Method**
	Fri, 1/28	Module 2: Chapter 2 Essential Chemistry for Biology Due (Extended Deadline 1/30) Chapter 2 Study Guide Due (Extended Deadline 1/30)
3	Mon, 1/31	Begin Reviewing Module 3: Chapter 3 The Molecules of Life
	Tue, 2/1	**IN LAB: Lab 2 – pH**
	Fri, 2/4	Module 3 HW: Chapter 3 Due (Extended Deadline 2/6) Chapter 3 Study Guide Due (Extended Deadline 2/6)
4	**Tue, 2/8**	**IN LAB: Lab 3 – Biomolecules**
5	Mon, 2/14	Begin Reviewing Module 4: Chapter 4 A Tour of the Cell
	Tue, 2/15	**IN LAB: EXAM 1 (Ch. 1-3)** **Lab 4 - Microscopes**
	Fri, 2/18	Module 4 HW: Chapter 4 Due (Extended Deadline 2/20) Chapter 4 Study Guide Due (Extended Deadline 2/20)
6	Mon, 2/21	Begin Reviewing Module 5: Chapter 5 The Working Cell
	Tue, 2/22	**IN LAB: Lab 5 - Cells**
	Fri, 2/25	Module 5 HW: Chapter 5 Due (Extended Deadline 2/27) Chapter 5 Study Guide Due (Extended Deadline 2/27)
7	**Tue, 3/1**	**IN LAB: EXAM 2 (Ch. 4-5)** **Lab 6 – Cell Transport**
8	Mon, 3/7	Begin Reviewing Module 6: Chapter 6 Cellular Respiration
	Tue, 3/8	**IN LAB: LAB PRACTICAL 1 (Labs 1-6)**
	Fri, 3/11	Module 6 HW: Chapter 6 Due (Extended Deadline 3/13) Chapter 6 Study Guide Due (Extended Deadline 3/13)
		SPRING BREAK
9	Mon, 3/21	Begin Reviewing Module 7: Chapter 7 Photosynthesis
	Tue, 3/22	**IN LAB: Lab 7 – Enzymes**
	Fri, 3/25	Module 7 HW: Chapter 7 Due (Extended Deadline 3/27) Chapter 7 Study Guide Due (Extended Deadline 3/27)
10	Mon, 3/28	Begin Reviewing Module 8: Chapter 8 Cell Reproduction
	Tue. 3/29	**IN LAB: Lab 8 – Respiration and Fermentation**
	Fri, 4/1	Module 8 HW: Chapter 8 Due (Extended Deadline 4/3) Chapter 8 Study Guide Due (Extended Deadline 4/3)
11	Mon, 4/4	Begin Reviewing Module 9: Chapter 9 Patterns of Inheritance
	Tue, 4/5	**IN LAB: EXAM 3 (CH. 6-8)** **Lab 9 – Photosynthesis**
	Fri, 4/8	Module 9 HW: Chapter 9 Due (Extended Deadline 4/10) Chapter 9 Study Guide Due (Extended Deadline 4/10)
12	Mon, 4/11	Begin Reviewing Module 10: Chapter 10 The Structure and Function of DNA/Chapter 12 DNA Technology
	Tue, 4/12	**IN LAB: Lab 10 – Mitosis and Meiosis** **Lab Project Due**
	*Fri, 4/15	Module 10 HW: Chapter 10/12 Due (Extended Deadline 4/18) Chapter 10/12 Study Guide Due (Extended Deadline 4/18)
13	Mon, 4/18	Begin Reviewing Module 11: Chapter 13 – How Populations Evolve
	Tue, 4/19	**IN LAB: Lab 11 – Genetics**
	Fri, 4/22	Module 11 HW: Chapter 13 Due (Extended Deadline 4/24) Chapter 13 Study Guide Due (Extended Deadline 4/24)
14	**Tue, 4/26**	**IN LAB: EXAM 4 (Ch. 9, 10, 12)** **Lab 12 – DNA and Electrophoresis Due**
15	**Tue, 5/3**	**LAB PRACTICAL 2 (Labs 7-13)**
16	**Tue, 5/10**	**FINAL EXAM (ALL CHAPTERS)**

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://build.com.edu/uploads/sitecontent/files/student-services/Student_Handbook_2019-2020v5.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.* https://build.com.edu/uploads/sitecontent/files/student-services/Student_Handbook_2019-2020v5.pdf

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 Holly Bankston at 409-933-8520 or hbankston@com.edu. The Office of Services for Students with Disabilities is located in the Student Success Center.

Counseling Statement: Any student needing counseling services is requested to please contact Holly Bankston in the student success center at 409-933-8520 or hbankston@com.edu. Counseling services are available on campus in the student center for free and students can also email counseling@com.edu to set up their appointment. Appointments are strongly encouraged; however, some concerns may be addressed on a walk-in basis.

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 March 2. The last date to withdraw from the 16-week session is April 25. The last date to withdraw for the 2nd 8-week session is May 4.

F_N Grading: The F_N grade is issued in cases of *failure due to a lack of attendance*, as determined by the instructor. The F_N 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 F_N grade is at the discretion of the instructor. The last date of attendance should be documented for submission of an F_N 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.

COVID-19 Statement: All students, faculty, and staff are expected to familiarize themselves with materials and information contained on the College of the Mainland's Coronavirus Information site at www.com.edu/coronavirus. In compliance with Governor Abbott's May 18 Executive Order, face coverings/masks will no longer be required on COM campus. Protocols and college signage are being updated. We will no longer enforce any COM protocol that requires face coverings. We continue to encourage all members of the COM community to distance when possible, use hygiene measures, and get vaccinated to protect against COVID-19. Please visit com.edu/coronavirus for future updates.