



**BIOL-1408-002IN**  
**Biology for Non-Science Majors I**  
**Summer II 2024**  
**Online**

**Instructor Information:** Lauren N. Miterko, Ph.D.

*E-mail:* [lmiterko@com.edu](mailto:lmiterko@com.edu) (**preferred method of communication**)

*Phone:* 609-713-0570

**Virtual Office Hours:** M/F 3:00 PM – 5:00 PM, or by appointment

**Required Textbook, Materials, and Resources:**

**Required Textbook**

*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:

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

*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** – You will have several assignments on Mastering Biology for each topic covered. **Login will be completed through Brightspace/D2L.**
- **Respondus Lockdown Browser and a webcam for Respondus Monitor** – available through Brightspace/D2L.

You are responsible for maintain 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 studies, 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:**

#### *Mastering Biology*

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 the lecture exams and the final exam will be taken during class time and will consist of multiple choice, true/false, 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 of, 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.

**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.**

### **Determination of Course Grade/Detailed Grading Formula:**

#### *Lecture Grade*

1. **Lecture exams (300 points)** – A total of 3 lecture exams, each worth 100 points, will be given throughout the semester (see Tentative Course Outline).

- Chapter Study Guides (110 points)** – For each chapter, you will complete a Chapter Study Guide to be turned in via Brightspace/D2L. These study guides also serve as the review for exams.
- Mastering Biology Activities (110 points)** – You will have Mastering Biology Activities for each chapter of the textbook.
- Discussion Board Posts (50 points)** – You will have various in-class discussions to complete throughout the semester, each worth 10 points.
- Comprehensive Final Exam (150 points)** – The final exam covers **ALL** the material presented in lecture and assigned as reading throughout the semester.

Assignment	Total Points Possible
3 Lecture Exams	300 (100 points each)
11 Chapter Study Guides	110 (10 points each)
11 Mastering Biology Activities	110 (10 points each)
5 Discussion Board Posts	50 (10 points each)
1 Comprehensive Final Exam	150
<b>Total</b>	720

#### *Laboratory Grade*

- Mastering Biology Labs (110 points)** – Each lab will have Mastering activities to be completed for your lab grade.
- Lab Practicals (200 points)** – Two Lab Practicals will be given during the semester, covering material from previous labs.

Assignment	Total Points Possible
11 Mastering Biology Labs	110 (10 points each)
2 Lab Practicals	200 (100 points each)
<b>Total</b>	310

#### *Grading Scale*

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

Letter Grade	Grade Average	Total Points Earned (Lecture + Laboratory, out of 1030 pts)
<b>A</b>	89.5% - 100%	≥ 922
<b>B</b>	79.5% - 89.4%	819 - 921
<b>C</b>	69.5% - 79.4%	716 - 818
<b>D</b>	59.5% - 69.4%	613 - 715
<b>F</b>	0% - 59.4%	0 - 612

### **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.

- *Mastering Biology Activities, Discussion Board Posts, 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 one day (see course schedule) that will result in a **10%-point reduction** if submitted past the posted deadline.
- *Lecture Exams and Lab Practicals* are an exception and have no extended deadline.

#### **Make-Up Policy**

- *MasteringBiology Activities, Quizzes, Chapter Study Guides, and Labs* **do not** have a make-up policy due to the extended deadline.
- *Lecture Exams and Lab Practicals* – Should you anticipate an absence on an exam day you must contact your instructor by e-mail **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 or without instructor approval.

#### **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.

<b>Student Learner Outcome</b>	<b>Maps to Core Objective</b>	<b>Assessed via this Assignment</b>
1. Distinguish between prokaryotic, eukaryotic, plant and animal cells, and identify major cell structures.		Discussion Board Lab 4 & 5
2. Identify stages of the cell cycle, mitosis (plant and animal), and meiosis.		Lab 10
3. Interpret results from cell physiology experiments involving movement across membranes, enzymes, photosynthesis, and cellular respiration.	Empirical and Quantitative Skills	Lab 6, 7, 8, & 9
4. Apply genetic principles to predict the outcome of genetic crosses and statistically analyze results.		Lab 11
5. Describe karyotypes, pedigrees, and biotechnology and provide an example of the uses of each.		Lab 11 & 12
6. Identify the importance of karyotypes, pedigrees, and biotechnology.		Discussion Board
7. Identify parts of a DNA molecule, and describe replication, transcription, and translation.		Discussion Board
8. Analyze evidence for evolution and natural selection.	Critical Thinking	Discussion Board
9. Apply scientific reasoning to investigate questions and utilize scientific tools such as microscopes and laboratory equipment to collect and analyze data.		<b>ALL</b> Lab Assignments

10. Use critical thinking and scientific problem-solving to make informed decisions in the laboratory.		<b>ALL</b> Lab Assignments
11. Communicate effectively the results of scientific investigations.	Communication	<b>ALL</b> Lab Assignments
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	<b>ALL</b> Lab Assignments

### 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* 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, Prof. Sheena Abernathy at (409)933-8330 or [sabernathy@com.edu](mailto:sabernathy@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. <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.

## Summer II 2024 Tentative Course Schedule:

Week	Date	Lecture & Laboratory Assignment	Assignment Due Dates	Extended Deadlines (10-15% penalty)
1	M, 7/08/24	Review "Read Me First" in D2L and Syllabus Introduction to Course	<b>Discussion Board #1</b> due by 11:59 PM	T, 7/09/24 by 11:59 PM
	T, 7/09/24	Review <b>Chapter 1</b> <b>Mastering Biology:</b> Lab 1	<b>Chapter 1</b> Study Guide and <b>Mastering Biology Lab 1</b> due by 11:59 PM	W, 7/10/24 by 11:59 PM
	W, 7/10/24	Review <b>Chapter 2</b> <b>Mastering Biology:</b> Lab 2	<b>Chapter 2</b> Study Guide and <b>Mastering Biology Lab 2</b> due by 11:59 PM	Th, 7/11/24 by 11:59 PM
	Th, 7/11/24	Review <b>Chapter 3</b> <b>Mastering Biology:</b> Lab 3	<b>Chapter 3</b> Study Guide and <b>Mastering Biology Lab 3</b> due by 11:59 PM	F, 7/12/24 by 11:59 PM
	F, 7/12/24	<b>Review Chapters 1-3</b>	<b>Discussion Board #2</b> due by 11:59 PM	S, 7/13/24 by 11:59 PM
2	M, 7/15/24	<b>Practice Exam</b>	<b>Mastering Biology Activities</b> (Chapters 1-3) due by 11:59 PM	T, 7/16/24 by 11:59 PM
	T, 7/16/24	<b>EXAM 1: Chapters 1-3</b>		
	W, 7/17/24	Review <b>Chapter 4</b> <b>Mastering Biology:</b> Lab 4	<b>Chapter 4</b> Study Guide and <b>Mastering Biology Lab 4</b> due by 11:59 PM	Th, 7/18/24 by 11:59 PM
	Th, 7/18/24	Review <b>Chapter 5</b> <b>Mastering Biology:</b> Lab 5	<b>Chapter 5</b> Study Guide and <b>Mastering Biology Lab 5</b> due by 11:59 PM	F, 7/19/24 by 11:59 PM
	F, 7/19/24	<b>LAB PRACTICAL 1: Labs 1-5</b>	<b>Discussion Board #3</b> due by 11:59 PM	S, 7/20/24 by 11:59 PM
3	M, 7/22/24	<b>Review Chapters 4-5</b>	<b>Mastering Biology Activities</b> (Chapters 4-5) due by 11:59 PM	T, 7/23/24 by 11:59 PM
	T, 7/23/24	<b>EXAM 2: Chapters 4-5</b>		
	W, 7/24/24	Review <b>Chapter 6</b> <b>Mastering Biology:</b> Lab 6	<b>Chapter 6</b> Study Guide and <b>Mastering Biology Lab 6</b> due by 11:59 PM	Th, 7/25/24 by 11:59 PM
	Th, 7/25/24	Review <b>Chapter 7</b> <b>Mastering Biology:</b> Lab 7	<b>Chapter 7</b> Study Guide and <b>Mastering Biology Lab 7</b> due by 11:59 PM	F, 7/26/24 by 11:59 PM
	F, 7/26/24	<b>Review Chapters 6-7</b>	<b>Discussion Board #4</b> due by 11:59 PM	S, 7/27/24 by 11:59 PM
4	M, 7/29/24	<b>Review Chapters 6-7</b>	<b>Mastering Biology Activities</b> (Chapters 6-7) due by 11:59 PM	T, 7/30/24 by 11:59 PM
	T, 7/30/24	<b>EXAM 3: Chapters 6-7</b>		
	W, 7/31/24	Review <b>Chapter 8</b> <b>Mastering Biology:</b> Lab 8	<b>Chapter 8</b> Study Guide and <b>Mastering Biology Lab 8</b> due by 11:59 PM	Th, 8/01/24 by 11:59 PM

	Th, 8/01/24	Review <b>Chapter 9</b> <b>Mastering Biology:</b> Lab 9	<b>Chapter 9</b> Study Guide and <b>Mastering Biology Lab 9</b> due by 11:59 PM	F, 8/02/24 by 11:59 PM
	F, 8/02/24	Review <b>Chapter 10/12</b> <b>Mastering Biology:</b> Lab 10	<b>Chapter 10/12</b> Study Guide and <b>Mastering Biology Lab 10/12</b> due by 11:59 PM	S, 8/03/24 by 11:59 PM
5	M, 8/05/24	Review <b>Chapter 13</b> <b>Mastering Biology:</b> Lab 11	<b>Chapter 13</b> Study Guide and <b>Mastering Biology Lab 13</b> due by 11:59 PM	T, 8/06/24 by 11:59 PM
	T, 8/06/24	<b>LAB PRACTICAL 2: Labs 6-11</b>	<b>Discussion Board #5</b> due by 11:59 PM	W, 8/07/24 by 11:59 PM
	W, 8/07/24	<b>Review Chapters 9-13</b>	<b>Mastering Biology Activities</b> (Chapters 9-13) due by 11:59 PM	Th, 8/08/24 by 11:59 PM
	Th, 8/08/24	<b>Review for Final Exam</b>		
	F, 8/09/24	<b>COMPREHENSIVE FINAL EXAM:</b> <b>All Chapters</b>		



## **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\\_2023-2024\\_v2.pdf](https://www.com.edu/student-services/docs/Student_Handbook_2023-2024_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](mailto: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 1<sup>st</sup> 5-week session is July 1. The last date to withdraw from the 10-week session is July 30. The last date to withdraw for the 2<sup>nd</sup> 5-week session is August 2.

**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](mailto:deanofstudents@com.edu) or [communityresources@com.edu](mailto: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.