



**BIOL2401.105C3**

**Anatomy and Physiology I**

**Fall 2024**

**Monday/Wednesday 2-4:50 pm, STEAM Building, Room 339**

**PowerPoint Lectures on course topics are located in the Content section of Brightspace.**

**Instructor Information:** Dr. Bytheway; [jbytheway@com.edu](mailto:jbytheway@com.edu) 409-933-8288; STE-325.19

**Student hours and location:**

Monday/Wednesday 9-10:30 am in STE-325-19

Tuesday/Thursday 10:00-12:00 pm in STE-325.19

Tuesday Virtual meetings from 10:00 – 10:30 am \*\* Students initiate via email

Or by appointment (email me to set up an appointment)

**Required Textbook/Materials:**

**Lecture Textbook**

- Marieb, E.N. & Hoehn, K., 2019. Human Anatomy and Physiology, 11th ed. Boston, MA; Pearson Education, Inc.  
This is an **eBook via VitalSource in Brightspace and you will have access to the eBook from day one.**

**Laboratory Manual**

- Amerman, E., 2017. Exploring Anatomy & Physiology in the Laboratory, 3rd edition. Englewood, Colorado, Morton Publishing Company (customized for COM, some pages will be missing) ISBN-13: 978-1-61731-955-6

**Course Description:** Anatomy and Physiology I is the first part of a two-course sequence. It is a study of the structure and function of the human body including cells, tissues, and organs of the following systems: integumentary, skeletal, muscular, nervous, and special senses. Emphasis is on interrelationships among systems and regulation of physiological functions involved in maintaining homeostasis. Prerequisite: 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. BIOL 1408 with a grade "C" or better is strongly recommended as a prerequisite but is not required.

**Course Requirements:**

The course requirement is three lecture hours combined with lab twice a week. Depending on class progression, inclement weather, etc., the schedule of material to be covered on the syllabus may change as we go through the semester. This will be indicated verbally in class and if there are significant changes to the course, I will generate a revised syllabus. **It is your responsibility** to make sure you listen to syllabus changes in class and mark your syllabus accordingly.

If needed, I will provide announcements in Brightspace prior to class time. Please make sure you check Brightspace before you come to class.

**Lecture:** Lecture format may include use of whiteboard, Power Point slides, videos, film clips, photos, or animations. **Assigned textbook chapters are to be read prior to class.** PowerPoint lectures, announcements, documents, additional optional readings, etc., will be handed out in class or posted in Brightspace. You are responsible for printing out and bringing materials to class as appropriate. **PowerPoint**

**lectures are posted 12-48 hours prior to class and will remain visible on Brightspace for two weeks. They are then removed. Make sure you download them before they are removed.**

Topics and concepts covered during lecture or included in the assigned reading will be included in exams.

**Laboratory:** The laboratory component of the course involves reinforcing concepts discussed in lecture using a variety of hands-on and visual approaches.

### ***Exams***

There are three lecture exams. Each lecture exam may consist of multiple-choice, fill-in-the-blank, matching, true-false, and identification questions. Lecture exam dates are listed in the Course Syllabus. Exams will not be *permanently* returned to the student after testing; however, students will have an opportunity to review the exams.

No electronic devices, including watches, are permitted during the exam. Hats are to be removed prior to the exam.

No exam grade will be dropped in this course. Exam grades are not curved however bonus points may be offered and applied to the exams.

Students will have 2 weeks, following the date of the return of an exam, to contact the course instructor regarding discrepancies. No further consideration will be given after this time.

Students requiring special accommodation for taking exams should contact the ADA office (information listed below in the syllabus). Students are individually responsible for scheduling their own exam times with the ADA office and **must notify me one week in advance of the arrangement**. This ensures I have enough time to get an exam copy over to the center.

### ***Quizzes***

There are five quizzes. Each quiz may consist of multiple-choice, fill-in-the-blank, matching, and identification questions. Quiz dates are listed on the Course Syllabus.

### ***Lab Practical Exams:***

There are two lab practical exams. Both are administered in the lab and consist of identification using anatomical models, microscopic slides, photo images, and the Syndaver. Lab Practical exam dates are listed in the Course Syllabus.

### ***Lab Assignments/Exercises***

Lab assignments/exercises are excellent tools to reinforce what you have learned in lecture and help you to understand and retain the material. There are lab assignments each week that are due at the end of lab or per the discretion of the instructor (depending on the progression of the class/lab).

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

Students progress will be assessed via

- **2 lecture exams (100 points each) and one Final Comprehensive exam (200 points)**
- **2 lab practical exams (50 points each)**
- **Assignments (point count varies)**
- **5 quizzes (25 points)**

### **GRADING POLICY**

20% First Exam  
25% Second Exam

### **Grading Scale**

A = 100-90  
B = 89-80

15%	Quizzes/Exercises/assignments	C = 79-70
10%	Attendance and participation	D = 69-60
30%	Final Exam	F = 59-below
100%	Total	

**FN** = failure of the course due to non-attendance and non-completion of course assignments

**I** = may be assigned at the instructor's discretion per the college's incomplete policy.

**W** = withdrawal may be assigned per the college's withdrawal policy.

### **Late Work, Make-Up, and Extra-Credit Policy:**

#### ***Late Work***

Lab assignments/exercises are due during the lab session or may be extended to the following lab session per the discretion of the instructor (depending on the progression of the class/lab). Missed assignments, with no prior notification by the student to the instructor, can be completed with a 5% decrease in total points for each missed day. If you've missed an assignment please contact the instructor to discuss how you may complete it. All make-ups of missed assignments are at the discretion of the instructor.

#### ***Make-up Exam Policy***

**No make-up examinations, for Lecture or Lab, will be administered for this course without written medical or logistical (e.g., car accident) emergency documentation.**

**\*\*If a student comes into the classroom 30 minutes after a quiz or exam has started (without prior notification) OR after a student or students have left the examination room, the student will not be permitted to take the exam and **no make-up exam will be administered.****

#### ***Extra Credit***

Extra credit **is not** an option for this course.

#### **Attendance Policy:**

Face-to-face attendance is **required** for this course. Being absent for three or more lectures/labs, without written documentation, will result in an "F" for the course grade.

Class and Labs start promptly at the scheduled class time. Arrive on time. Late arrival is disruptive and disrespectful to me and your peers.

If you know that you are going to miss a class, let me know in advance. If something comes up and you cannot attend class, let me know as soon as possible.

Students will receive 1 point for each fully attended class.

#### **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. In addition to your COM email, additional information (change in syllabus, course content, etc.) will be posted through announcements in Brightspace.

Student Learner Outcome (SLO)	Maps to Core Objective(s)	Assessed via this Assignment
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1. Use anatomical terminology to identify and describe the locations of major organs of each system covered.		Exams 1-3
2. Explain interrelationships among molecular, cellular, tissue, and organ functions in each system.		Exam 1 Questions
3. Describe the interdependency and interactions of the systems.		Skeletal System Case Study
4. Explain the contributions of organs and systems to maintaining homeostasis.	<b>CT</b>	<b>Skeletal System Case Study</b>
5. Describe modern technology and tools used to study anatomy and physiology.		Muscle Fatigue lab
6. Apply appropriate safety and ethical standards.		Lab Safety Quiz
7. Locate and identify anatomical structures.		Lab Practical 1 & 2
8. Appropriately utilize laboratory equipment, such as microscopes, dissection tools, general lab ware, physiology data acquisition systems, and virtual simulations.		Lab Practical 1 & 2
9. Work collaboratively to perform experiments.	<b>TW</b>	Lab Experiments
10. Demonstrate the steps involved in the scientific method.		Conductivity Lab
11. Use critical thinking and scientific problem-solving skills, including, but not limited to, inferring, integrating, synthesizing, and summarizing, to make decisions, recommendations, and predictions.	<b>EQS</b>	Lab Activities

### **Academic Dishonesty:**

Each student is expected to do his/her own work and conduct themselves in an honest, professional, and mature manner.

Disciplinary actions will be taken for students who exhibit disorderly conduct, cheat on exams, submit plagiarized work, or are involved in collusion (helping others cheat or plagiarize) as defined in the Student Handbook under the heading, "Discipline and Penalties." The maximum penalty imposed for violations will be an F in the course.

The student will also be referred to the Associate Vice President of Student Success and Conduct for further disciplinary action. Please read through the "Standards of Student Conduct" in the Student Handbook for a more complete discussion of these issues and your rights and responsibilities.

### **Student Concerns:**

If you have any questions or concerns about any aspect of this course, please contact me using the provided contact information. If you continue to have questions after discussing your concern with me, please contact the Chair of the Biology Department, Professor Abernathy at [sabernathy@com.edu](mailto:sabernathy@com.edu) or 409-933-8330.

## Course Schedule (TENTATIVE SCHEDULE)

WK	DAYS	LECTURE	LAB (All assignments are due at the end of lab unless otherwise instructed)
1	8/19-8/21	CH1: The Human Body CH2: Chemistry	<b>Lab Safety Quiz (online)</b> Exercise (Ex). Ex. 1-2 Procedure (Proc) 1, Ex. 1-3 Proc 1, Ex. 1-4 Proc 1 & 3 with Syndaver, Ex. 2-1 Proc 1
2	8/26-8/28	CH 2: Chemistry (Continued) <b>8/28 Quiz Chapters 1 &amp; 2</b>	Exercise (Ex). 1-2 Procedure (Proc) 1, Ex. 1-3 Proc 1, Ex. 1-4 Proc 1 with Syndaver & 3 Ex. 2-1 Proc 1 (Continued)
3	9/2	<b>Labor Day holiday. No class.</b>	
3	9/4	CH3: Cells	Ex. 4-1 Proc 1 & 3, Intro to Microscopes, Ex. 4-2 Proc 1 & 2, Ex. 4-4 Proc 1 & 2
4	9/9-9/11	CH4: Tissues <b>9/11 Quiz Chapters 3&amp;4</b> Review for Exam 1	Ex. 5-1 Proc 1, Ex. 5-2 Proc 1-3, Ex. 5-3 Proc 1, Ex. 5-4 Proc 1, Ex. 5-5 Proc 1
5	<b>9/16</b>	<b>Exam 1 Chapters 1-4</b>	
5	9/18	CH5: Integumentary System	Ex. 6-1 Proc 1 & 2, Ex 6-2 Proc 3, 6-4 Proc 1
6	9/23-9/25	CH6: Bone and Skeletal Tissue CH7: The Skeleton <b>9/25 Quiz Chapters 6&amp;7</b>	Ex. 7-1 Proc 1 & 2, 7-3 Proc 1, 7-4 Proc 1, 8-1 Proc 1, Ex. 8-2, Ex. 8-3 Proc 1, Ex. 8-4 Proc 1 & 3
7	9/30-10/2	CH8: Joints Lab Practical Review	Ex. 9-1 Proc 1, Ex. 9-2 Proc 2, Ex. 9-3 Proc 1, Ex. 9-4 Proc 1
8	10/7-10/9	Lab Practical Review	<b>10/9 Lab Practical</b>
9	10/14-10/16	CH9&10: Muscular System	Ex. 10-1 Proc 1, Ex. 11-1 Proc 1, 2 & 3
10	10/21-10/23	<b>10/21 Quiz Chapters 9&amp;10</b> CH11: Nervous System & Tissue Review for Exam 2	Ex. 10-1 Proc 1, Ex. 11-1 Proc 1, 2 & 3 (continued) Ex. 12-1 Proc 1 & 4
11	10/28-10/30	Review for Exam 2 CH12: Central Nervous System <b>Exam 2 Chapters 5-10</b>	Ex. 12-2 Proc 1 & 2
12	11/4-11/6	CH13: Peripheral Nervous System CH14: Autonomic Nervous System	Ex. 13-1 Proc 1, Ex. 13-2 Proc 1 Ex. 14-2 Proc 1, Ex 14-3 Proc 1
13	11/11-11/13	CH14: Autonomic Nervous System (Continued) <b>11/13 Quiz Chapter 12</b>	Ex. 13-1 Proc 1, Ex. 13-2 Proc 1 Ex. 14-2 Proc 1, Ex 14-3 Proc 1 (continued)
14	11/18-11/20	CH15: Special Senses (Eyes & Ears) Review for Lab Practical	Ex. 15-1 Proc 1, Ex. 15-2 Proc 1 <b>11/20 Lab Practical</b>
15	11/25	CH15: Special Senses (Eyes & Ears)	Ex. 15-1 Proc 1, Ex. 15-2 Proc 1

		Review for Final Exam	
15	11/27	<b>Thanksgiving Holiday. No class</b>	
16	12/2-12/4	Review for Final Exam/Study Day <b>Final Exam</b>	

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## 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 with 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 at 409-933-8919 or [klachney@com.edu](mailto:klachney@com.edu). The Office of Services for Students with Disabilities is located in the Student Success Center.

**Textbook Purchasing Statement:** A student attending the 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 before the last eligible day for a "W" grade. Before withdrawing, students should speak with the instructor and consult an advisor. Students can withdraw only six times during their college career by state law. The last date to withdraw from the 1<sup>st</sup> 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 2<sup>nd</sup> 8-week session is November 26.

**FN Grading:** The FN grade is issued in cases where *failure is 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 have 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 to see what assistance can be offered to meet your academic goals.

### Resources to Help with Stress:

If you are experiencing stress or anxiety about your daily living needs, including food, and housing, or 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).