



BIOL2401.221C3
Anatomy and Physiology I
Fall 2025

We meet on Monday and Wednesday from 6 pm to 8:50 pm in STE-333.

Instructor Information: Dr. Jantz; kjantz@com.edu; 409-933-8255; FAB 122

Student hours and location:

Tuesday from 2 pm to 5 pm in FAB 122

Wednesday from 2:30 to 5:30 pm in FAB 122 or on the 3rd floor of the STEAM Building

Thursday from 11 am to 12:30 pm in FAB 122

Required Textbook/Materials:

- Marieb, E.N. & Hoehn, K., 2019. Human Anatomy and Physiology, 11th ed. Boston, MA; Pearson Education, Inc. (**eBook via VitalSource in Brightspace**)
- Amerman, E., 2017. Exploring Anatomy & Physiology in the Laboratory, 3rd edition. Englewood, Colorado, Morton Publishing Company (customized for COM; **pages will be missing**) ISBN-13: 978-1-61731-955-6 (**Lab Manual**)

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 placed on system interrelationships and regulating physiological functions that maintain 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:

Exams & Comprehensive Final Exam

All exams, 4 exams and 1 comprehensive final exam (CFE), will be administered in class on a computer (either your device or a borrowed one from the classroom). Each lecture exam consists of multiple-choice, matching, true-false, and short answer questions. Exam dates are listed in the "What's due when?" document and Brightspace.

Online Pre-Exam Quizzes via Brightspace

There will be 4 online pre-exam quizzes in Brightspace. Each quiz consists of multiple-choice questions. You will have 60 minutes to take the quiz. The "What's due when?" document lists lecture quiz due dates.

Online Chapter Quizzes via Brightspace:

There will be 13 online chapter quizzes in Brightspace. Each quiz consists of multiple-choice questions. You will have 60 minutes to take the quiz. The "What's due when?" document lists lecture quiz due dates.

Online Lab Activity Quizzes (LAQ) via Brightspace

There will be 12 online lab activities in Brightspace. Each activity reinforces the material you will be tested on in the 2 scheduled lab practicals. **You are responsible for watching all videos uploaded to the Lab Material area for each lab activity quiz.** The "What's due when?" document lists lab quiz due dates.

Lab Practicals

Two lab practicals will be administered in person in the lab. The “What’s due when?” document lists the practical dates.

Bonus Points:

Bonus points are **not** part of the course requirements, but there will be opportunities to earn them throughout the semester. All bonus points will be added to an exam or practical.

Determination of Course Grade/Detailed Grading Formula:

Course Assessment	Total Points	Percentage of Course
LECTURE PORTION	700	70.0%
Online Syllabus Quiz	10 points	1.0%
Online Chapter Quizzes (points vary by quiz)	200 points	20.0 %
Online Pre-Exam Quizzes (4)	100 (25 pts each)	10.0 %
Exams (4), in-person	340 (85 pts each)	34.0 %
Comprehensive Final Exam, in-person	50 points	5.0%
LAB PORTION	300	30.0%
Online Lab Safety Quiz	10 points	1.0%
Online Lab Activity Quizzes (12)	120 (10 pts each)	12.0%
Lab Practicals (2), in person	170 (85 pts each)	17.0%
TOTAL POINTS	1000	100%

Grading Scale:

A = between 900 and 1000 points

B = between 800 and 899.9 points

C = between 700 and 799.9 points

D = between 600 and 699.9 points

F = below 599.9 points

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

I = may be assigned at the instructor’s discretion by the college’s incomplete policy.

W = withdrawal may be assigned by the college’s withdrawal policy.

Science Lab Policy:

This course consists of both a lecture and laboratory grade component. Students must earn 70% or better in the laboratory component to pass the course successfully. **Earning less than 70% in the laboratory component will result in an F for the course, regardless of the lecture grade.** A passing grade for the course is necessary for passing the laboratory component and failing the lecture component. Deviations from this policy will be at the sole discretion of the instructor.

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

EXAMS: Exam make-ups are allowed at the discretion of the instructor.

LAB PRACTICALS: Practical make-ups are allowed at the discretion of the instructor.

MISSED ASSIGNMENTS: If you miss an assignment, don't hesitate to contact the instructor to make arrangements to complete it.

Attendance Policy:

Students are required to come to the lab to complete the face-to-face laboratory exercises required in the laboratory component of this course. **Absences in three required lab meetings will result in an "F" for the course grade unless the instructor approves a documented excuse.**

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.

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

Academic Dishonesty:

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 use the provided contact information. If you continue to have questions after discussing your concern with me, please contact Dr. Barney at rbarney@com.edu or 409-933-8727.

Course Schedule (SUBJECT TO CHANGE IF NEEDED)

WK	DAYS	LECTURE	LAB
1	8/18 to 8/24	CH1: The Human Body CH2: Chemistry Syllabus Quiz (online) Chapter 1 Quiz (online)	Lab Safety Quiz (online) Ex. 1-3, 1-4, 1-5, 1-6 LAQ 1 (online)
2	8/25 to 8/31	CH2: Chemistry CH3: Cells Chapter 2 Quiz (online)	Ex. 2-1, Conductivity Lab LAQ 2 (online)
3	9/1 to 9/7	College Holiday on 9/1 CH3: Cells Chapter 3 Quiz (online)	Ex. 4-1, 4-4, Diffusion Lab, Intro to Microscopes LAQ 3 (online)
4	9/8 to 9/14	CH4: Tissues Pre-Exam Quiz 1 (online) Exam 1, in-person Chapter 4 Quiz	Ex. 5-1 to 5-4 LAQ 4 (online)
5	9/15 to 9/21	CH5: Integumentary System Chapter 5 Quiz (online)	Ex. 6-1, 6-2, 6-3, 6-4 LAQ 5 (online)
6	9/22 to 9/28	CH6: Bone and Skeletal Tissue CH7: The Skeleton Chapter 6/7 Quiz (online)	Ex. 7-1, 7-3, 7-4, 8-1 to 8-3 LAQ 6 (online)
7	9/29 to 10/5	CH8: Joints Chapter 8 Quiz (online)	Forensic Lab Ex. 8-4, 9-1, 9-2, 9-3 LAQ 7 (online)
8	10/6 to 10/12	Practical 1 Review Pre-Exam Quiz 2 (online) Exam 2, in-person	Lab practical 1, in-person
9	10/13 to 10/19	CH9/10: Muscular System Chapter 9/10 Quiz (online)	Ex. 10-1, 11-1, 11-3 LAQ 8 (online)
10	10/20 to 10/26	CH11: Nervous System & Tissue Chapter 11 Quiz (online)	Ex. 10-1, 11-1, 11-3 Vernier Muscle Analysis Lab
11	10/27 to 11/2	CH12: Central Nervous System Chapter 12 Quiz (online)	Ex. 12-1, 12-2 Neural Synapse Lab LAQ 9 (online)
12	11/3 to 11/9	CH13: Peripheral Nervous System Pre-Exam Quiz 3 (online) Exam 3, in-person Chapter 13 Quiz	Ex. 13-1, 13-2 Sheep Brain Dissection LAQ 10 (online)
13	11/10 to 11/16	Withdraw Day (11/14) CH14: Autonomic Nervous System Chapter 14 Quiz (online)	Ex. 14-2, 14-3, 14-4 LAQ 11 (online)
14	11/17 to 11/23	CH15: Special Senses (Eyes & Ears) Chapter 15 Quiz (online)	Ex. 15-1, 15-2, 15-4 LAQ 12 (online)
15	11/24 to 11/30	Pre-Exam Quiz 4 (online) Exam 4, in-person Comprehensive Final Exam, in-person	College Holiday 2pm on 11/25 to 11:59pm on 11/30
16	12/1 to 12/4	Lab practical 2, in-person	Fall Graduation on 12/6

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%20Handbook%202024-2025%20v2.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 accommodation(s) 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 1. The last date to withdraw from the 16-week session is November 14. The last date to withdraw for the 2nd 8-week session is November 25.

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.