



BIOL2401.101CL
Anatomy & Physiology I
Spring 2024
Monday/Wednesday: 11:00am- 1:50pm in Room STEAM 333

Instructor Information: Dr. Jennifer Bieszke, email: jbieszke@com.edu, phone: 409-933-8332

Student hours and location:

Monday/Wednesday: 10:00am-11:00am in STEAM 333

Monday: 5:00pm- 7:00pm Virtual Office Hours in TEAMS

(Meeting Link will be posted in D2L Brightspace "Virtual Office Hours" unit)

Tuesday/Thursday: 4:30pm-6:15pm STEAM BUILDING 325.28

(You will need to call my office phone number in order to receive entrance into my office during evening office hours on Tuesday if entering the office suite after 5 pm)

Important! Appointments upon request

Course Communication: Email is my preferred method of communication.
Responses can be expected within 24 hours!

Required Textbook/Materials:

(etext) Marieb, E.N. & Hoehn, K., 2019. Human Anatomy and Physiology, 11th edition, Boston, MA; Pearson Education, Inc. bundled with MODIFIED Mastering A&P on-line component. ISBN-13: 9780134763415. **The required materials listed above were purchased at the time of registration and you will gain access to these in Brightspace when classes begin. These items are required and you cannot choose an option to discontinue their use.**

(Lab Manual) Amerman, E., 2022. Exploring Anatomy & Physiology in the Laboratory, 4th edition. Englewood, Colorado, Morton Publishing Company (customized for College of the Mainland) ISBN-13: 9781640436206

(Scantrons & #2 pencil) You will need four 882-E scantrons for taking lecture exams in this course. They are sold individually in the COM bookstore. You will also need a #2 lead pencil for using the scantrons when taking the course examinations.

(COM D2L Brightspace) COM D2L Brightspace will be used for a few online activities. In addition, D2L Brightspace will allow you to communicate with other students and the instructor. Many class and supplemental resources will also be available through [D2L Brightspace](#). Training is not required to access D2L Brightspace; however, the "Online Learner Workshop on Demand" for acquiring D2L Brightspace skills is available for self-enrollment. The self-enrollment link is located on the "Login page". If you have any questions regarding course access or training, please submit a [D2L Brightspace Support Ticket](#) to the EdTech Services department. **You are responsible for maintaining your own online access to the course. Computers are available on campus.** Be aware that access to computers is 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 by the due date.

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:

Lecture Grade (700 points)

Lecture Exams & Final Exam

All Exams will be taken during class and will consist of the following format. Short-answer, essay, matching, multiple choice, and T/F. Scantron and #2 pencil will be required for the exam. Exams will be taken in the first part of class only so it is important that you arrive on time and work efficiently on the exam. In order to prepare you for the Final Exam which will have a cumulative part of the exam, each successive test in the course will contain material from the previous test to help with retention of material as a bonus section.

Quizzes

You will have **four quizzes** that are found in D2L Brightspace in either the Quizzes location in the Navigation Course Menu Bar or with links embedded in the corresponding unit. You will have 40 minutes to answer these questions. You also have two attempts on this quiz where your grade will be determined by the best score from the two. If you experience technical difficulty, please contact me. If I can verify the technical difficulty, I can reset quiz if the due date has not passed. I advise you to try and take the quiz earlier in the week vs. the last hour on the Due date! Quiz due dates are listed in the schedule.

Lecture Assignments

These assignments are found in the Mastering A&P unit in D2L Brightspace, where you will have to enter the Mastering Course Home link to see the list of Mastering A&P assignments. These assignments are designed specifically to help you learn and think critically about the lecture material. You have two attempts on these assignments where the best score is kept as your grade.

Multiple Posts in Discussion Forums

You will have two required discussion forums where you are going to have to make an initial post to the discussion forum in D2L Brightspace. Links will be provided in the Lecture Material Content area. The initial post will have specific criteria that you must research and form an opinion regarding the topic. You will also have to make a second post to another student's post to extend the discussion further in a **positive** manner. It is important to recognize if the wrong information is being posted, but please be respectful of others when notifying a person of misinforming information.

Case Study Group Assignments

You will have two case study group assignments that will be carried out in-class and out of class. It will consist of research and writing a well composed report.

Laboratory Grade (300 points)

Important! Students must achieve at least 70% of the points offered in the following assignments to receive a passing grade-refer to the lab policy below.

Laboratory Safety Quiz

You will have one laboratory safety quiz. You will learn about laboratory safety in our first in-class laboratory meeting and will have a quiz during the second class meeting. Please see the DUE date in the Schedule that follows.

Laboratory Assignments

These assignments will be based on the Exercises that come from your lab manual or handouts posted in Brightspace. Make sure to bring these exercises and handouts to class as they will be the basis for an in-class assignment. **Important! Attendance is mandatory for completing these assignments.**

Lab Practicals

There will be 3 laboratory practicals. These exams consist of in-class Power Point presentations. The practicals are timed so if a student comes late, he/she risks not being able to complete or even take this test.

Grade Feedback!

All Assignments/Quizzes and Exams will be graded with grades posted in D2L Brightspace within one week of the due date. **If you question a grade, this must be discussed within one week of the posting of the grade.** Grades cannot be disputed on individual course requirements after this point.

Determination of Course Grade/Detailed Grading Formula: (methods of evaluation to be employed to include a variety of means to evaluate student performance)

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

Course Assessment	Total Points	Percentage of Course
LECTURE PORTION	700	70.0%
Lecture Exams (4)	360 (90 points each)	36.0 %
On-line Quizzes (4)	80 (20 points each)	8.0 %
Lecture Assignments (10)	100 (10 points each)	10.0 %
Discussion Forums (2)	20 (10 points each)	2.0 %
Case Study Group Assignments (2)	40 (20 points each)	4.0 %
Final Exam	100	10.0 %
LABORATORY PORTION	300	30.0%
Lab Safety Quiz (1)	4	0.4%
Lab Assignments (12)	96 (8 points each)	9.6%
Lab Practicals (3)	200 (65,70,65 points each)	20.0%
TOTAL POINTS	1000	100%

Grading Scale (based on points not percentage-please remember this!):

- A** A Sum of the points earned for course assessments that equals between 900 and 1000 points
- B** A Sum of the points earned for course assessments that equals between 800 and 899 points
- C** A Sum of the points earned for course assessments that equals between 700 and 799 points
- D** A Sum of the points earned for course assessments that equals between 600 and 699 points
- F** A Sum of the points earned for course assessments that equals below 600 points.
- I** An incomplete may be assigned at the discretion of the instructor in accordance with the policy.
- W** A withdrawal may be assigned in accordance with college policy.

Lab Science Policy

This course consists of both a lecture and laboratory grade 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.

Make-Up Policy:

LECTURE EXAMS: Make-ups may be allowed at the discretion of the instructor and/or the presentation of documented excuse that is approved by me for the reason for which a student will miss the class date. The Final Exam score can be used to replace lowest test score and is also an option to the student with an excused absence.

QUIZZES: All quizzes are taken on-line so only if there is proof of extenuating circumstances that prevent the taking of the quiz over the period of time that the quiz is available, the instructor may use the percentage of the upcoming lecture exam to calculate the quiz grade.

DISCUSSION FORUMS & LECTURE ASSIGNMENTS: Only if there is proof of extenuating circumstances that prevent the assignments from being completed over the period of time that these assignments are available, the instructor may allow the make up of these assignments.

CASE STUDY GROUP ASSIGNMENT: Students will pair up to complete a case study and write up their research in one report. There is no extension of the due dates unless you have a documented excuse approved by me.

LAB ASSIGNMENTS: Unexcused absences on lab class days will result in a zero on the lab assignment for that day. In the case of an excused absence, you will need a documented excuse for missing a lab class approved by me, the percentage earned from the upcoming lab practical grade will be used to calculate assignment score.

LAB PRACTICALS: Make-up practicals will only be allowed at the discretion of the instructor with the presentation of a documented excuse.

EXTRA CREDIT: There are no Extra Credit assignments given in this course, but bonus point activities may be assigned along with other assignments. Bonus Point activities cannot be made up!

Attendance Policy:

Students are expected to attend all class sessions as listed on the course calendar. These attendance policies apply to the face-to-face lab portion of the class.

- **Attendance is required for completing the lab assignments** – please refer to the make-up policy for lab assignments. If you miss a lab class, it is your responsibility to catch up on the material despite failing the lab assignment as a result of an absence. I can help you.
- **Tardiness Policy:** Students arriving late (five minutes) will be noted in the daily attendance. Extended tardiness longer than this may result in an absence.
- **Withdrawal Policy:** If you are unable to successfully complete the course requirements, you may wish to drop this class. It is **your responsibility** to initiate a request for withdrawal from any course. It is in your best interest to visit with me before making that decision. However, if you decide to drop this class, it is **your responsibility** to withdraw by **April 22nd, 2024**. You are still enrolled in this course until you have submitted this form. If you do not withdraw by this date, you will receive a grade of “0” (zero) for all remaining work that you did not complete, which may result in a grade of “F” for the class.

Please if you are having trouble in the course especially early on, contact me so that we can get you the help that you need to avoid a withdrawal from the course.

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. (Faculty may add additional statement requiring monitoring and communication expectations via D2L or other LMS)

(Additional Policy regarding Course Communication) If you need to contact me, please use my email for reasons of tardiness as well as questions and concerns. **Also, please sign the email with your name and identify your course number and section when contacting me.** If you are having difficulty with the course material, come to office hours or please contact me via phone or email to make an appointment.

Student Learner Outcome		Maps to Core Objective	Assessed via this Assignment
1.	Use anatomical terminology to identify and describe locations of major organs of each system covered.		Lab Assignment 1
2.	Explain interrelationships among molecular, cellular, tissue, and organ functions in each system.		Case Study Group Assignment 2
3.	Describe the interdependency and interactions of the systems.		Exam 1 Essay Question
4.	Explain contributions of organs and systems to the maintenance of homeostasis.	Critical Thinking (CT)	Bone Forensic Lab
5.	Identify causes and effects of homeostatic imbalances.		Case Study Group Assignment 1
6.	Describe modern technology and tools used to study anatomy and physiology.		Discussion Forum 2
7.	Apply appropriate safety and ethical standards.		Lab Safety Quiz
8.	Locate and identify anatomical structures.		Lab Practicals 1, 2 & 3
9.	Appropriately utilize laboratory equipment, such as microscopes, dissection tools, general lab ware, physiology data acquisition systems, and virtual simulations.		Lab Assignments 4, 9 and 12
10.	Work collaboratively to perform experiments.	Teamwork (TW)	Bone Forensic Lab
11.	Demonstrate the steps involved in the scientific method.		Conductivity handout- Lab Assignment 2
12.	Communicate results of scientific investigations, analyze data and formulate conclusions	Communication Skills (CS)	Bone Forensic Lab
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.	Empirical& Quantitative Skills (EQS)	Bone Forensic Lab

Academic Dishonesty: Disciplinary actions will be taken for students who exhibit disorderly conduct, cheat on exams, submit plagiarized work (see below), 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 Dean of Students 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 contact information previously provided. If, after discussing your concern with me, you continue to have questions, please contact Sheena Abernathy, Science & Engineering Department Chair at 409-933-8330 or by email: sabernathy@com.edu.

Course Outline: Refer to Weekly Announcements in Brightspace for updated information!

WEEK	LECTURE MATERIAL	LABORATORY ACTIVITIES
1- Jan. 16 – Jan.20	Martin Luther King Jr Holiday (1/15) Chapter 1 – Introduction to A&P Intro Discussion Forum DUE 1/22/24 Lecture Assignment 1 DUE 1/22/24	Lab Safety Quiz DUE 1/22/24 Exercise 1-3 and 1-4 (Directional/Regional Terms) Exercise 1-5 and 1-6 (Body Cavities/Planes)
2- Jan. 21 -27	Chapter 2- Chemistry Lecture Assignment 2 DUE 1/27/24	LAB 1 DUE 1/24/24 Conductivity lab DEMONSTRATION Ex. 2-1: pH Lab (pH, Acids and Bases)
3- Jan. 28 – Feb. 3	Chapter 3 – The Cell Lecture Assignment 3 DUE 2/3/24 QUIZ 1 – (Online) DUE 2/4/24	LAB2 DUE 1/31/24 Exercise 4-1 (Organelles and Cell Structures) Pearson Diffusion Lab Exercise 4-4 (Mitosis and the Cell Cycle)
4- Feb. 4-10	Chapter 4- Tissues EXAM 1 – (CH 1,2,3) DUE 2/5/24 Discussion Forum 1-Post 1 DUE 2/08/24 Discussion Forum 1-Post 2 DUE 2/10/24	LAB3 DUE 2/7/24 Exercise 5-1 through 5-4 (Epithelial, Connective, Muscle and Nervous Tissues) BONUS LAB ACTIVITIES 1,2,3 DUE 2/10/24
5- Feb. 11-17	Chapter 5- Integumentary System Lecture Assignment 4 DUE 2/17/24 Case Study Group Assignment START	LAB PRACTICAL 1 DUE 2/14/24 LAB4 DUE 2/14/24 EX6-1 (Skin Anatomy) & EX6-2 (Histology) EX6-3(Touch Receptors) EX 6-4 (Fingerprinting)
6- Feb. 18 -24	Chapter 6 – Bones & Skeletal Tissues	LAB5 DUE 2/21/24 EX 7-1 (Bone Histology) EX 7-3 (Bone Markings) EX 7-4 (Bone Anatomy) EX 8-1 to 8-3 (Skeleton)
7- Feb. 25 -Mar. 2	Chapter 6-Bones & Skeletons & Chapter 7 Case Study Assignment 1 Due 2/26/24 Lecture Assignment 5 DUE 3/02/24 QUIZ 2 – (On-line) DUE 3/03/24	LAB6 DUE 2/28/24 Bone Forensic Lab (Handout)
8- Mar. 3-9	Chapter 8- The Joints EXAM 2 (CH4,5,6) DUE 3/04/24 Lecture Assignment 6 DUE 3/09/24	LAB7 DUE 3/06/24 EX 9-1& EX 9-2 (Joint Types) EX 9-3 (Knee Joint) BONUS LAB ACTIVITIES 4,5,6 DUE 3/09/24
SPRING BREAK (3/11-3/17)		
9- Mar. 18 -23	Chapter 9- Muscles Chapter 10-The Muscular System Discussion Forum 2-Post 1 DUE 3/21/24 Discussion Forum 2-Post 2 DUE 3/23/24	LAB PRACTICAL 2 DUE 3/20/24 EX10-1 (Skeletal Muscle Anatomy) EX11-1(Skeletal Muscle Anatomy & Microanatomy) EX11-3(Smooth and Cardiac Muscle Tissues)
10- Mar. 24 – 30	CH 9- Muscles &CH 11 – Nervous Tissue Case Study Assignment 2 START Lecture Assignment 7 DUE 3/30/24	LAB 8 DUE 3/27/24 Vernier Muscle Fatigue Handout
11- Mar. 31 – Apr. 6	CH11 – Nervous Tissue & CH 12– CNS Lecture Assignment 8 DUE 4/06/24 QUIZ 3 – (Online) DUE 4/07/24	LAB 9 DUE 4/03/24 Exercise 12-1 (Neurons and Neuroglia) Exercise 12-2 (Nervous Tissue/Neural Synapse Lab)
12- Apr. 7 -13	Chapter 12- CNS & Chapter 13- PNS EXAM 3 - (CH 8, 9, 11) DUE 4/08/24 Lecture Assignment 9 DUE 4/13/24	LAB 10 DUE 4/10/24 Exercise 13-1 (Anatomy of the Brain) Exercise 13-2 (Anatomy of the Spinal Cord)
13- Apr. 14 -20	Chapter 13- PNS & Chapter 14- ANS Case Study Assignment 2 DUE 4/15/24 Lecture Assignment 10 DUE 4/20/24	LAB 11 DUE 4/17/24 EX 14-2 (Cranial Nerve Anatomy) EX 14-3 (Spinal Nerves) EX 14-4 (ANS)
14- Apr. 21-27	Chapter 15- Eyes and Ears Only QUIZ 4– (Online) DUE 4/28/24	LAB 12 DUE 4/24/24 EX15-1 (Eye) EX 15-2 (Ear, hearing & Equilibrium) EX 15-4 (Physiology of the General Senses) BONUS LAB ACTIVITIES 7,8,9,10 DUE 3/09/24
15- Apr. 28 -May 4	Exam 4 (CH 12,13,14,15) DUE 4/29/24	Lab Practical 3 DUE 5/1/24
16- May. 5 -11	FINAL EXAM DUE 5/06/24	

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. *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 at 409-933-8919 or klachney@com.edu. The Office of Services for Students with Disabilities is located in the 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 28. The last date to withdraw from the 16-week session is April 22. The last date to withdraw for the 2nd 8-week session is May 1. The last date to withdraw for spring mini session is May 29.

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.