



BIOL2401.106CL

Anatomy and Physiology I Spring 2021

Tuesday and Thursday: 9:30 am – 12:20 pm STEAM Building Room 339

Instructor Information: Stacy Foulks, Ph.D. email:sfoulks@com.edu

Student hours and location:

Conducted in classroom 9:00 – 9:30 AM Tuesday and Thursday, or by appointment
Course Communication: Email, responses can be expected within 24 hours.

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. The lab provides hands-on learning experiences for exploration of human system components and basic physiology.

Prerequisites:

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.

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.

(Lab Manual) Amerman, E., 2017. Exploring Anatomy & Physiology in the Laboratory, 3rd edition. Englewood, CO Morton Publishing Company (customized for COM) ISBN-13:978-1-61731-955-6

These REQUIRED materials, listed above, were purchased at the time of registration and you will gain access to these in Blackboard when classes begin. These items are REQUIRED, you cannot choose an option to discontinue their use.

Textbook Purchasing Statement (applies to Lab Manual ONLY): 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.

Scantrons: 882-E available at the bookstore, \$0.39 each, and No. 2 pencils for exams

(COM Blackboard) <https://de.com.edu/webapps/login/>. COM Blackboard will be used for online activities, quizzes, and more. Blackboard allows students to communicate with each other and the instructor. Many class resources will be available through Blackboard. Training is required to access Blackboard. If you have any questions regarding course access or training, please contact the Distance Education department (<https://edtech.com.edu>) at extension 8476.

You are responsible for maintaining your 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. The college computers are only available during hours of operation of 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 Requirements:

Lecture Grade (700 points):

Lecture Exams & Final Exam (440 points): All Exams will be taken during class and will consist of the following format. Short-answer, essay, matching, multiple choice, T/F and diagram identification. 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. To prepare you for the cumulative section of the final exam, each successive test in the course will contain material from the previous section to help with retention of material.

Quizzes (80 points): You will have **four quizzes** that are found in Blackboard in the Quizzes tab. Each quiz consists of 2 short-answer, 2 multiple choice question and a matching section. You will have 30 minutes to answer these questions. Quizzes will be assigned the week before an upcoming exam. If you experience technical difficulty, please contact me. If I can verify the technical difficulty, I can reset the quiz if the due date has not passed. I advise you to try to take the quiz early in the week and NOT the last hour on the due date! Quiz due dates are listed in the schedule below.

Lecture Assignments (90 points): These assignments are found in the Pearson Mastering tab in Blackboard where you will have to click on the Assignment Button 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.

Multiple Posts in Discussion Forums (50 points): You will have five discussion forums where you are going to have to make an initial post to the discussion forum. This post will have specific criteria that you must meet when making your post. 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 incorrect information is posted but please be respectful of others when notifying a person of incorrect information.

Disease Group Project (40 points): After the first lab practical, the group project will be assigned in class, and you will use the time after the exam to make plans with your group in preparing the group project. There will be a written and oral part to this project which will be presented in class after the second lab practical.

Professional Behavior (10 points): Appropriate, polite behavior is expected at all times. This includes coming to class on time and prepared, participating in lecture and lab activities, turning in assignments on time, and always demonstrating courtesy to others. I expect this to be an easy 10 points for everyone!

Laboratory Grade (300 points):

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

Laboratory Safety Quiz (10 points): You will have one laboratory safety quiz. You will learn about laboratory safety in our first laboratory. The quiz will be during the second laboratory. Please see the due date in the schedule.

Laboratory Assignments (130 points): These assignments will be based on the exercises that come from your lab manual or handouts posted in Blackboard. 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 (160 points): There will be two laboratory practicals. The practicals consist of in-class Power Point examinations. The practicals are timed so if a student comes late to this examination, he/she risks not being able to complete or even take this test.

Grade Disputes:

All assignments/quizzes and exams will be graded. Grades will be posted on Blackboard within one week of the due date. If you question a grade, this must be addressed within one week of the grade posting. Grades cannot be disputed on individual course requirements after this point.

Determination of Course Grade/Detailed Grading Formula:

Course Assessment	Total Points	Percentage
LECTURE PORTION	700	70.0%
Lecture Exams (4)	320 (80 points each)	30.0 %
On-line Quizzes (4)	80 (20 points each)	8.0 %
Lecture Assignments (9)	90 (10 points each)	9.0 %
Discussion Forums (4)	40 (10 points each)	5.0 %
Disease Group Project	40	4.0%
Professional Behavior	10	1.0%
Final Exam	120	12.0%
LABORATORY PORTION	300	30.0%
Lab Safety Quiz (1)	10	1.0%
Lab Assignments (13)	130 (10 points each)	13.0%
Lab Practicals (2)	160 (80 points each)	16.0%
TOTAL POINTS	1000	100.0%

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 less than 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:

EXAMS: Make-up exams will not be allowed unless I am presented with a legitimate, documented excuse that meets my approval, preferably in advance. Make-up exams may be allowed for other reasons that cannot be documented and will be decided by me on an individual basis and you will have to agree to a designated time decided by me. Only one make-up exam will be allowed per student for the duration of the class. There will be no make-up opportunity for the Final Exam unless there is an extreme documented excuse such as illness or death in the family. Any make-up exam will be different than the original exam and will be primarily written.

ON-LINE EXAMS AND QUIZZES: No make-up opportunity will be allowed for missed online exams unless there is an extreme, documented, extenuating circumstance such as illness or death in family.

DISCUSSION FORUMS & LECTURE ASSIGNMENTS: No make-up opportunity will be allowed for these assignments unless there is an extreme, documented, extenuating circumstance such as illness or death in family.

DISEASE GROUP PROJECT: Each part of the course project must be completed and delivered by the due dates. There will be no extension of due dates, PLAN AHEAD!

LAB ASSIGNMENTS: If you have an extreme, documented excuse approved by me, preferably in advance, one lab assignment may be made up. This will be in the form of a short research paper on the subject.

LAB PRACTICALS: No make-up opportunity will be allowed for lab practicals unless there is a documented extenuating circumstance such as illness or death in family.

Attendance Policy:

Students are expected to attend all class sessions as listed on the course calendar.

Attendance is required for completing the lab assignments – missing six classes with undocumented excuses will result in an F in the course in accordance with the science lab policy. Receiving an F is also possible if missed lab sessions results in poor performances on lab practical exams

Tardiness Policy: Students arriving late (five minutes) will be noted in the daily attendance.

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 25th, 2022. You are still enrolled in this course until you have submitted the correct form. If you do not withdraw by the deadline, you will receive a grade of 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, contact me, the earlier the better, so that we can get you the help 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. 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 make an appointment via email.

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 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 contact information previously provided. If, after discussing your concern with me, you continue to have questions, please contact Sheena Abernathy, Chair of the Science Department, at 409-933-8330 or by email: sabernathy@com.edu.

Course outline: (Tentative Schedule)

WK	DAYS	LECTURE	LAB SCHEDULE
1	1/18 - 1/20	Chapter 1: Introduction to A&P	Lab Safety and quiz Exercises 1-1 to 1-5 (Body regions & cavities)
2	1/25 - 1/27	Chapter 2: Chemistry	Conductivity Lab DEMONSTRATION Exercise 2-1: pH Lab
3	2/1 - 2/4	Chapter 3: The Cell <i>(Quiz 1)</i>	Exercise 4-1 (Cell) Exercise 4-2 (Diffusion Beaker and Plates) Exercise 4-4 (Mitosis)
4	2/8 - 2/10	<u>Exam 1 (Chaps 1-3)</u> Chapter 4: Tissues	Exercises 5-1 through 5-4 (Tissues)
5	2/15 - 2/17	Chapter 5: The Integumentary System <i>(Quiz 2)</i>	<u>Lab Practical 1 (Exercises 1 - 5)</u> Exercise 6-1(Skin Anatomy) Exercise 6-2 (Histology of Integument) Exercise 6-4 (Fingerprinting)
6	2/22 - 2/24	Chapter 6: Bones and Skeletal Tissue <u>Exam 2 (Chaps 5-6)</u>	Exercise 7-1 (Histology of Osseous Tissue) Exercise. 7-3 (Bone Marking and Bone Shapes) Exercise 7-4 (Anatomy of Long Bones) Exercise 8-1 to 8-3 (SLO8)
7	3/1 - 3/3	Chapter 7: The Skeleton <i>(Quiz 3)</i>	Forensic Lab Handout Exercise 8-4 (Disarticulated Skeleton)
8	3/8 - 3/10	Chapter 8: The Joints <u>Exam 3 (Chaps 6-8)</u>	Exercise 9-3 (Knee Joint)-use of lab equipment Exercise 9-1 Classification of Joints Exercise 9-2 Synovial Joints Exercise 9-5 Motions of Synovial Joints
	3/15 - 3/17	SPRING BREAK	
9	3/22 - 3/24	Chapter 9: Muscles Chapter 10: The Muscular System	<u>Lab Practical 2 (Exercises 6 - 9)</u> Exercise 10-1 (Skeletal Muscle Anatomy)
10	3/29 - 3/31	Chapter 11: Nervous Tissue	Exercise 11-1 (Microscopic Muscle Anatomy) Vernier Muscle Fatigue Handout
11	4/5 - 4/6	Chapter 12: The Central Nervous System <i>(Quiz 4)</i>	Exercise 12-1 Neurons and Neuroglia Neural Synapse Lab Exercise
12	4/12 - 4/14	<u>Exam 4 (Chaps 9-12)</u> Chapter 13: The Peripheral Nervous System	Exercise 13-1 Brain Models & Dissection
13	4/19 - 4/21	Chapter 14: The Autonomic Nervous System	Exercise 14-2 Cranial Nerves Exercise 14-3 Spinal Nerve Reflex
14	4/26 - 4/28	Chapter 15: The Eyes	Exercise 15-1 Anatomy of Eye & Dissection Exercise 15-2 Anatomy of an Ear & Hearing
15	5/3 - 5/5	Chaptere 15: The Ears	<u>Lab practical 3 (Exercise 10 - 15)</u>
16	5/10 - 5/13	Review - Final Exam	

Student Learner Outcome (SLO)	Maps to Core Objective(s)	Assessed via this Assignment
1. Use anatomical terminology to identify and describe locations of major organs of each system covered.		Lab Practical 1 and 2
2. Explain interrelationships among molecular, cellular, tissue, and organ functions in each system.		Lecture Assignment 9
3. Describe the interdependency and interactions of the systems.		Disease Group Project
4. Explain contributions of organs and systems to the maintenance of homeostasis.	Critical Thinking	Forensic Lab Assignment
5. Identify causes and effects of homeostatic imbalances.	Communication Skills	Forensic Lab Assignment
6. Describe modern technology and tools used to study A&P		Lab Practical 3
7. Apply appropriate safety and ethical standards.		Lab Safety Quiz
8. Locate and identify anatomical structures.		Lab Practical 2
9. Appropriately utilize laboratory equipment, such as microscopes, dissection tools, general lab ware, physiology data acquisition systems, and virtual simulations.		Lab Practical 1
10. Work collaboratively to perform experiments.	Teamwork	Forensic Lab Assignment
11. Demonstrate the steps involved in the scientific method.		Exercise 25-1 The Model Kidney
12. Communicate results of scientific investigations, analyze data and formulate conclusions.		Exercise 19-2 Blood Typing & Exercise 19-3 Murder Mystery
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	Forensic Lab Assignment

The GCIC Academic Symposium:

COM's GCIC Academic Symposium is an opportunity for students to showcase their best academic and creative projects. Because faculty know the value of this event, we are especially motivated to help you gain knowledge concerning it. Speak with me if you'd like to learn more and/or visit: <http://www.com.edu/symposium>. Participation in the symposium helps develop your professional skills, widens your professional networks, and should be noted on your resume. This year, the symposium is Friday, April 1, 2022. The abstract submission deadline is Friday, Feb. 25, 2022, at 11:59 pm.

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. Please email me (Dr. Foulks) and tell me one thing you liked and one thing you disliked about the syllabus. Anyone who does this will receive extra credit points, the quantity to be decided by me based on the quality and professionalism of the email.

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.