



BIOL 2401.101CL

Anatomy & Physiology I

Fall 2021

Monday and Wednesday 8-10:50 AM

Meeting Times: Monday and Wednesday 8:00 am -10:50 am

Lecture and Lab: STEAM Building, Room 333

Instructor: Dr. Leslie Mayer

- **Communicating with your professor:** ALL electronic communication with the professor must be through your COM email. Due to FERPA restrictions, faculty cannot share any information about performance in the class through other electronic means.
- **Email:** LMayer1@com.edu → E-mail is the best way to reach me. (Use only your COM email address to communicate via e-mail)
- **Phone:** 409-933-8244

Office Hours and Location: Monday and Wednesday
7:30 am – 8:00 am
STEAM Building, Room 333
Please email me to make an appointment.

Required Textbook and Materials:

- Purchase Scantrons** (Scantrons will be turned in to Dr. Mayer and distributed throughout the semester):
 - Purchase 5 (five) Scantrons: 881-E
 - Purchase 15 (fifteen) Scantrons: Quizstrip 815-E
- Class Textbook:** You automatically purchased the eBook at the time of registration. You will gain access to the eBook (through VitalSource) in Blackboard when class begins.
Textbook Information: 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:** (Purchase in the COM bookstore) Amerman, E., 2017. Exploring Anatomy & Physiology in the Laboratory, 3rd edition. Englewood, Colorado, Morton Publishing Company (customized for College of the Mainland) ISBN-13: 978-1-61731-955-6
MAKE SURE TO HAVE YOUR LABORATORY MANUAL daily

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 a hands-on learning experience for exploration of human system components and basic physiology. Systems to be studied include integumentary, skeletal, muscular, nervous, and special senses.

Course Requirements:

Lecture Exams & Final Exam:

You will have a total of four lecture exams and a comprehensive final exam over the course material. Exams will be taken in class and timed. Each exam may consist of multiple-choice, fill-in-the-blank, matching, true-false, short-answer, essay and/or identification. Information that will be tested may come from the textbook, class lecture material, laboratory material, and/or any handouts. **Each test must be returned at end of class period. Any test that is not returned will have the grade on the exam changed to a “zero”.**

Quizzes:

You will have 15 quizzes in this course. Quizzes will cover material from the week’s lecture. Quizzes are taken in class and are on Wednesdays.

Professionalism:

Your participation in this class in a professional manner is required. Examples of behaviors which detract from this component are: emails sent to the professor written as if sending a text message rather than a proper email, assignments turned in late or with difficulty due to waiting till last minute, arriving late to lab, etc. For a comprehensive listing, refer to the tab in the left-hand panel of Blackboard called “Professionalism”.

Participation:

You are expected to participate in classroom activities. You may not always know the right answers, but you should make effort. Active participation increases your learning and critical thinking skills.

Your quality of participation will be reflected in your participation score. A participation score is assessed each day for the first fourteen weeks of class. Maximum score per day is 5 points.

All students are automatically allotted 3 points per day when present for an entire class period. Attentive participation (remaining on-task) in classroom activities for the entirety of a class period will result in 4 points. To achieve maximal point value of 5/day you should volunteer for opportunities, attempt to answer questions when called, ask appropriate questions independently, and display leadership characteristics.

An absence for any reason will result in an accumulation of zero (0) daily participation points.

Online Lab Checkouts:

Most weeks you will review an online Lab Activity and then complete a Lab Checkout. Lab Checkouts are questions concerning the material learned in the Lab Activity. Each Lab Activity is due by Thursday 8 PM of its assigned week, and is available for access a week before the due date. Refer to the schedule that follows.

Lab Practicals:

Two Lab Practicals are scheduled. A Lab Practical will cover material presented in lab during a given section and is taken in class. Please refer to the schedule that follow.

Any practical that is not returned at the end of class will have the grade on the quiz changed to a “zero”.

Anything turned-in without your name / student ID# is susceptible to not being graded and resulting in a grade of zero. *Double check all work before submitting*****

Determination of Course Grade/Detailed Grading Formula:

Course Assessment	Total Points	Percentage of Course
LECTURE PORTION	700	70.0%
Lecture Exams (4)	320 (80 points ea.)	32.0%
Final Exam	100	10.0 %
Quizzes (15)	120 (8 points ea.)	12.0%
Participation	140	14.0%
Professionalism	20	2.0%
LABORATORY PORTION	300	30.0%
Lab Checkouts (10)	100 (10 points ea.)	12.0%
Lab Practicals (2)	200 (100 points ea.)	20.0%
TOTAL POINTS	1000	100%

Grading Scale:

- 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** A 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.

Make-Up Policy:

Lecture Exams & Final Exam: Exams must be taken on the scheduled date. **If you miss the exam on the scheduled date you may receive a grade of zero (0).** Missed exams generally cannot be made up unless there is a documented illness or death in the family. Any variations are at the instructor’s discretion. You will need to contact Dr. Mayer via COM email and receive confirmation to be considered for make-up exam for the above reasons. Make-up exams must be taken within one week of the missed exam, and will be a different exam from what was administered in class.

Lab Practicals: Lab practicals are listed in the schedule found in this syllabus. **If you miss the lab practical you should expect to receive a grade of zero (0).** Any variations are at the professor's discretion.

Quiz: At the end of the semester, the lowest quiz grade is dropped and the highest will count double. No make-up quizzes are available. This is the case even if you desire to take a make-up quiz due to an anticipated or unanticipated absence.

Participation:

An absence for any reason (including illness, work conflicts, etc.) will result in zero (0) points assigned for the day. You cannot receive credit for activities you are not present to participate in.

Course outline: (Tentative Schedule)

WEEK #	SUBJECT	LABORATORY	Monday In Class	Wednesday In Class	DUE Thursday Online
1. Aug. 22 - Aug. 28	Chapter 1 – Intro. To A&P	Lab Safety Ex. 1-1 through 1-5 (Body regions & cavities)		Quiz 1	Lab Checkout 1
2. Aug. 29 – Sept. 4	Chapter 2 – Chemistry	Ex. 2-1 (pH)		Quiz 2	Lab Checkout 2
3. Sept. 5 – Sept. 11	Chapter 3 – The Cell	Ex. 4-1 (Cell) Dialysis Ex. 4-4 (Mitosis)	LABOR DAY HOLIDAY	Quiz 3	Lab Checkout 3
4. Sept. 12 – Sept. 18	Chapter 4 – Tissues	Ex.5-1 through 5-4 (Tissues)	Exam #1 (Chapters 1-3)	Quiz 4	Lab Checkout 4
5. Sept. 19 – Sept. 25	Chapter 5 – Integumentary System	Ex. 6-1(Skin Anatomy) Ex. 6-2 (Histology of Integument) Ex. 6-4 (Fingerprinting)		Quiz 5	Lab Checkout 5
6. Sept. 26 – Oct. 2	Chapter 6 – Bones & Skeletal Tissue	Exercise 7-1 (Histology of Osseous Tissue) Exercise. 7-3 (Bone Marking and Bone Shapes) Exercise 7-4 (Anatomy of Long Bones) Exercises 8-1 through 8-3 (Bones)	Exam #2 (Chapters 4,5)	Quiz 6	Lab Checkout 6

7. Oct. 3 – Oct. 9	Chapter 7 – The Skeleton	Forensic Lab Handout Exercise 8-4 (Disarticulated Skeleton)		Quiz 7	NO CHECKOUT THIS WEEK
8. Oct. 10 – Oct. 16	Chapter 8 -- The Joints	Exercise 9-3 (Knee Joint) Exercise 9-1 Classification of Joints Exercise 9-2 Synovial Joints Exercise 9-5 Motions of Synovial Joints		Quiz 8 Lab Practical #1 (Lab Material WEEK 1-7)	Lab Checkout 7
9. Oct. 17 – Oct. 23	Chapter 9 – Muscles Chapter 10 – The Muscular System	Exercise 10-1 (Skeletal Muscle Anatomy)	Exam #3 (Chapters 6,8)	Quiz 9	NO CHECKOUT THIS WEEK
10. Oct. 24 – Oct. 30	Chapter 11 – Nervous Tissue	Exercise 11-1 (Microscopic Muscle Anatomy) Vernier Muscle Fatigue Handout		Quiz 10	NO CHECKOUT THIS WEEK
11. Oct. 31 – Nov. 6	Chapter 12 – Central Nervous System	Exercise 12-1 Neurons and Neuroglia Neural Synapse Lab Exercise		Quiz 11	Lab Checkout 8
12. Nov. 7 – Nov. 13	Chapter 13 – Peripheral Nervous System	Exercise 13-1 Brain Models & Dissection	Exam #4 (Chapters 9, 11, 12)	Quiz 12	NO CHECKOUT THIS WEEK
13. Nov. 14 – Nov. 20	Chapter 14 – Autonomic Nervous System	Exercise 14-2 Cranial Nerves Exercise 14-3 Spinal Nerve Reflex		Quiz 13	Lab Checkout 9
14. Nov. 21 – Nov. 27	Chapter 15 – Eyes	Exercise 15-1 Anatomy of Eye & Dissection Exercise 15-2 Anatomy of an Ear & Hearing		Quiz 14	Lab Checkout 10
15. Nov. 28 -- Dec. 4	Chapter 15 – Ears	Reviews		Quiz 15 Lab Practical #2 (Lab Material Week 8-15)	NO CHECKOUT THIS WEEK

16. Dec. 5 -- Dec. 11	Grade Review		Comprehensive Final Exam		
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Attendance Policy: Your attendance is critical to the success you will have in this course.

- If you reach (4) or more marks of absence you may be dropped from the course at any time.
 - **The only exception is for a documented allowable excuse approved by the instructor (e.g. illness or immediate-relative death in the family), requested within 24 hours of the missed date. Documentation will be required and verified.**
- **Tardiness:**
 - Class begins at **8 AM**.
 - **I will begin** instruction, an assessment, an exam, a quiz, a bonus opportunity, or any activity at **8 AM**.
 - If you are not present in class **by 8:15 AM** you **will** be marked **late**.
 - Tardiness may result in an **absence** if not present when attendance is taken and may prevent you from participation in lab experiments, examinations, or lead to dismissal from class.
 - **If you are late and a quiz, exam, or activity has been administered, time will not be extended.** The assignment will be due at the end of the allotted time as it is for everyone else. Do your best not to eat into your own time.

Tardiness Policy: I understand sometimes you may be “running behind”. Do your best to make it to class on time. Tardiness may result in an absence if not present when attendance is taken and may prevent you from participation in lab experiments or examinations. If you are late and an exam, quiz, or activity has been administered, time will not be extended. The quiz / exam / activity will be due at the end of the allotted time as it is for the rest of the class. Do your best not to eat into your own time.

Drop Policy: If you miss four or more class periods I may drop you from the class at any time. You may receive an email from me for each absence that I have marked you for as courtesy, not obligation. Keep in mind, it is not my responsibility to drop you from the class. However, it is my right if your class in-attendance warrants so.

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 professor and consult an advisor. Students are only permitted to withdraw six times during their college career by State law. Refer to the Academic Calendar on the COM website to identify the withdrawal date for the current semester. After this date, whatever grade you have earned will become your permanent grade.

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. I want you to be here all the way until the end of the course. There is always a solution.

The Speaking, Reading and Writing Center provides free tutoring services to students, staff and faculty seeking assistance for writing, reading and oral presentations for academic and non-academic assignments/projects. Located in the Technical Vocational Building, Room 1306, the center provides face-

to-face and online tutoring sessions in a welcoming environment. Appointments can be made in person, or on the center scheduler at com.mywconline.com, or by clicking the SRWC icon on the COM website.

Please be aware that I reserve the right to make changes to the schedule/syllabus as necessary. Any changes or updates will be announced in class and/or through Blackboard.

Success Tips for Students:

1. *Attend Class.* Come prepared with all of your materials and ready to jump into learning.
2. *Get Organized.* Make sure you do not miss turning in assignments or taking tests.
3. *You must learn the material outside of class.* Wisdom is the learning you do when the lecture is over.
4. *Form Study Groups.* The best way to retain the course material is to teach others. Help others and learn from others. Ask the person next to you in class if they would like to study with you!
5. *Don't Get Behind but Ahead.* Use the Schedule in this syllabus and review the chapters before coming to class so that the new concepts are not foreign. There will be times when this is enforced rather than encouraged. If you miss a class, make sure you get notes from someone and review these as soon as possible!
6. *Ask Questions.* If during class you don't understand something, then please raise your hand and ask a question. If you are shy, please use my office hours or email to ask questions.

Early Alert Program: The Student Success Center at College of the Mainland has implemented an Early Alert Program because student success and retention is 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.

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.

Eating in Class: None allowed

Classroom Etiquette: Students should silence or vibrate their cell phones, tablets, and any other electronic devices. If your phone has a flashing light notification, please disable it in class. If you need to answer your phone, do step outside the classroom to take care of your business without disturbing others. It is my expectation that you limit the use of your phone to only when absolutely necessary.

Please take care of your restroom needs BEFORE class. If you MUST leave to use the restroom during class (and there is NO exam, quiz, or practical in progress), please leave quietly and return promptly without

disturbing class. You do not need to raise your hand. **You are responsible for any content you miss when you leave class.**

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.

Plagiarism: The practice of taking someone else's work or ideas and passing them off as one's 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. In addition, I am providing you with an internet link to a video on Plagiarism. I would strongly urge you to look this over early in the course.

Link to resource about ways to avoid plagiarism:

<http://en.writecheck.com/ways-to-avoid-plagiarism/>

Concerns/Questions Statement: 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

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.		Diagram questions on Exam 1, 2, 3, and 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.		Group Case Study Activity
4. Explain contributions of organs and systems to the maintenance of homeostasis.	CT	Group Case Study Activity
5. Identify causes and effects of homeostatic imbalances.		Group 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 2
9. Appropriately utilize laboratory equipment, such as microscopes, dissection tools, general lab ware, physiology data acquisition systems, and virtual simulations.		Lab Practical 3
10. Work collaboratively to perform experiments.	TW	Disarticulated Skeleton Race Assignment
11. Demonstrate the steps involved in the scientific method.		Bloody Cytology Exercise 4-3
12. Communicate results of scientific investigations, analyze data and formulate conclusions.	CS	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.	EQS	Forensic Lab

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 career. 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 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 that is 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 setup their appointment. Appointments are strongly encouraged; however some concerns may be addressed on a walk-in basis.