

BIOL2401.151HY

Anatomy and Physiology I Spring 2024

Saturday from 9 am -4:10 pm (lab <u>only</u> on campus) in STE-333

Instructor Information: Dr. Jantz; kjantz@com.edu; 409-933-8255; STE-325.19

Student hours and location:

Monday on-campus from 4:00-6:00 pm in STE-325.19

Tuesday virtual hours via email or Teams by appointment only 11:00 am to 12:30 pm

Wednesday on-campus from 12:00-2:00 pm and 5-6 pm in STE-325.19

Thursday virtual hours via email or Teams by appointment only 7:00 am to 8:00 pm

Required Textbook/Materials:

- Marieb, E.N. & Hoehn, K., 2019. Human Anatomy and Physiology, 11th ed. Boston, MA; Pearson Education, Inc. (eBook via VitalSource already in Brightspace/D2L)
- Amerman, E., 2017. Exploring Anatomy & Physiology in the Laboratory, 4th edition. Englewood, Colorado, Morton Publishing Company (customized for COM; some pages will be missing) ISBN-13: 978-1-61731-955-6 (**Lab Manual**)
- Web camera (either built into your computer or attachable) to take exams.

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:

Online Lecture Exams & Comprehensive Final Exam via Brightspace

There are 4 online exams and 1 comprehensive final exam (CFE) online. **Exams are administered in Brightspace/D2L using Respondus Lockdown Browser with Monitor.** Your computer must have a builtin webcam, or you can purchase an attachable webcam. Each lecture exam consists of multiple-choice, fill-in-the-blank, matching, true-false, essay, and identification. Exam dates are listed in the "What's due when/?" document and will be open for 7 days.

Online Exam Quizzes via Brightspace

There are 4 online exam quizzes in Brightspace. Each quiz consists of multiple-choice questions. You will have 60 minutes to answer the questions. Exam quizzes are assigned the week prior to an exam. The "What's due when/?" document lists exam quiz due dates.

Online Chapter Quizzes via Brightspace:

You will have 13 online chapter quizzes. Due dates are listed in the "What's due when/?" document by 11:59 pm on Saturday.

Online Lab Activity Quizzes (LAQ) via Brightspace

There are 12 online lab activities. Each activity reinforces material found in the 2 scheduled lab practicals. You are responsible for watching all videos uploaded to the Lab Material area for a lab activity. The "what's due when/?" document lists lab quiz due dates.

Lab Practicals

There are 2 lab practicals **administered in the lab**. Practical dates are listed in the "What's due when/?" document.

Bonus Points:

Bonus points are <u>not</u> a part of the course requirements, but opportunities to earn bonus points will be offered throughout the semester. All bonus points will be added to either an exam or a practical.

Determination of Course Grade/Detailed Grading Formula:

Course Assessment LECTURE PORTION	Total Points 700	Percentage of Course 70.0%
Online Syllabus Quiz	5 points	0.5%
Online Respondus Quiz	5 points	0.5%
Online Chapter Quizzes (points vary by quiz) 200 points	20.0 %
Online Exam Quizzes (4)	100 (25 pts each)	10.0 %
Online Lecture Exams (4)	340 (85 pts each)	34.0 %
Online Comprehensive Final Exam	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)	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

 \mathbf{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 discretion of the instructor in accordance with the college's incomplete policy.

W = withdrawal may be assigned in accordance with 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. <u>Earning less than 70% in the laboratory component</u> <u>will result in an F for the course, regardless of the lecture grade</u>. 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.

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: Please contact the instructor if you missed an assignment to make arrangements to complete the missed assignment.

Attendance Policy:

Attendance of the face-to-face laboratory component of the course is **required**. Being absent for three or more 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. In addition to your COM email, announcements pertaining to the course content, due date, and other updates will be posted in Brightpsace. You are required to actively monitor these posts to maintain awareness of any course changes.

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 the maintenance of 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 contact me using the contact information previously provided. If you continue to have questions after discussing your concern with me, please contact Prof. Abernathy at sabernathy@com.edu or 409-933-8330.

Course Schedule (SUBJECT TO CHANGE IF NEEDED)

			CT TO CHANGE IF NEEDED)
WK	DAYS	LECTURE	LAB
1	1/15 to	Syllabus Quiz (online)	
	1/15 to 1/21	CH1: The Human Body	
	1/21	Chapter 1 Quiz	
2		CH1: The Human Body	Ex. 1-3, 1-4, 1-5, 1-6
	1/22 to	CH2: Chemistry	Ex. 2-1, Conductivity Lab
	1/28	Chapter 2 Quiz	LAQ 1-2 (online)
	1/20	Respondus Quiz (online)	Lab Safety Quiz (online)
3	1/29 to	CH3: Cells	
	2/04	Chapter 3 Quiz	
4	2/04	CH4: Tissues	Ex. 5-1 to 5-4
•	2/05 to	Exam Quiz 1 (online)	Ex. 4-1, 4-4, Diffusion Lab, Intro to Microscopes
	2/11	Exam 1 (online)	LAQ 3-4 (online)
		Chapter 4 Quiz	
5	2/12 to	CH5: Integumentary System	
	2/12 to	Chapter 5 Quiz	
6	2 , 10	CH6: Bone and Skeletal Tissue	Ex. 6-1, 6-2, 6-3, 6-4
U	2/21 4-	CH7: The Skeleton	Ex. 7-1, 7-3, 7-4, 8-1 to 8-3
	2/21 to	Chapter 6/7 Quiz	Forensic Lab
	2/25	1	LAQ 5-7 (online)
7	2/26 to	CH8: Joints	Eligo (omino)
-	3/04	Chapter 8 Quiz	
8	2701	Practical 1 Review	Lab practical 1
	3/04 to	Exam Quiz 2 (online)	Dub pructicui I
	3/10	Exam 2 (online)	
		SPRING BREAK	SPRING BREAK
	3/11 - 3/17		
9	3/1/	CH9/10: Muscular System	Ex. 8-4, 9-1, 9-2, 9-3
	2/10 40	Chapter 9/10 Quiz	Ex. 10-1, 11-1, 11-3
	3/18 to 3/24	onapor 7/10 Quin	Vernier Muscle Analysis Lab
	3/24		LAQ 8 (online)
10		CH11: Nervous System & Tissue	Lite o (omine)
10	3/25 to	CH11: Nervous System & Tissue Chapter 11 Quiz	Erry o (omine)
10	3/25 to 3/31	CH11: Nervous System & Tissue Chapter 11 Quiz	
10		Chapter 11 Quiz CH12: Central Nervous System	Ex. 12-1, 12-2
		Chapter 11 Quiz	Ex. 12-1, 12-2 Ex. 13-1, 13-2
	3/31	Chapter 11 Quiz CH12: Central Nervous System	Ex. 12-1, 12-2 Ex. 13-1, 13-2 Sheep Brain Dissection
11	3/31 4/01 to	Chapter 11 Quiz CH12: Central Nervous System Chapter 12 Quiz	Ex. 12-1, 12-2 Ex. 13-1, 13-2
	3/31 4/01 to	Chapter 11 Quiz CH12: Central Nervous System Chapter 12 Quiz CH13: Peripheral Nervous System	Ex. 12-1, 12-2 Ex. 13-1, 13-2 Sheep Brain Dissection
11	3/31 4/01 to	Chapter 11 Quiz CH12: Central Nervous System Chapter 12 Quiz CH13: Peripheral Nervous System Exam Quiz 3 (online)	Ex. 12-1, 12-2 Ex. 13-1, 13-2 Sheep Brain Dissection
11	3/31 4/01 to 4/7	Chapter 11 Quiz CH12: Central Nervous System Chapter 12 Quiz CH13: Peripheral Nervous System Exam Quiz 3 (online) Exam 3 (online)	Ex. 12-1, 12-2 Ex. 13-1, 13-2 Sheep Brain Dissection
11 12	3/31 4/01 to 4/7 4/8 to	Chapter 11 Quiz CH12: Central Nervous System Chapter 12 Quiz CH13: Peripheral Nervous System Exam Quiz 3 (online) Exam 3 (online) Chapter 13 Quiz	Ex. 12-1, 12-2 Ex. 13-1, 13-2 Sheep Brain Dissection LAQ 9-10 (online)
11	3/31 4/01 to 4/7 4/8 to 4/14	Chapter 11 Quiz CH12: Central Nervous System Chapter 12 Quiz CH13: Peripheral Nervous System Exam Quiz 3 (online) Exam 3 (online) Chapter 13 Quiz CH14: Autonomic Nervous System	Ex. 12-1, 12-2 Ex. 13-1, 13-2 Sheep Brain Dissection LAQ 9-10 (online) Ex. 14-2, 14-3, 14-4
11 12	3/31 4/01 to 4/7 4/8 to 4/14 4/15 to	Chapter 11 Quiz CH12: Central Nervous System Chapter 12 Quiz CH13: Peripheral Nervous System Exam Quiz 3 (online) Exam 3 (online) Chapter 13 Quiz CH14: Autonomic Nervous System CH15: Special Senses (Eyes & Ears)	Ex. 12-1, 12-2 Ex. 13-1, 13-2 Sheep Brain Dissection LAQ 9-10 (online) Ex. 14-2, 14-3, 14-4 Ex. 15-1, 15-2, 15-4
11 12 13	3/31 4/01 to 4/7 4/8 to 4/14	Chapter 11 Quiz CH12: Central Nervous System Chapter 12 Quiz CH13: Peripheral Nervous System Exam Quiz 3 (online) Exam 3 (online) Chapter 13 Quiz CH14: Autonomic Nervous System CH15: Special Senses (Eyes & Ears) Chapter 14 & 15 Quiz	Ex. 12-1, 12-2 Ex. 13-1, 13-2 Sheep Brain Dissection LAQ 9-10 (online) Ex. 14-2, 14-3, 14-4
11 12	3/31 4/01 to 4/7 4/8 to 4/14 4/15 to 4/21	Chapter 11 Quiz CH12: Central Nervous System Chapter 12 Quiz CH13: Peripheral Nervous System Exam Quiz 3 (online) Exam 3 (online) Chapter 13 Quiz CH14: Autonomic Nervous System CH15: Special Senses (Eyes & Ears) Chapter 14 & 15 Quiz Withdraw Day (4/22)	Ex. 12-1, 12-2 Ex. 13-1, 13-2 Sheep Brain Dissection LAQ 9-10 (online) Ex. 14-2, 14-3, 14-4 Ex. 15-1, 15-2, 15-4
11 12 13	3/31 4/01 to 4/7 4/8 to 4/14 4/15 to 4/21 4/22 to	Chapter 11 Quiz CH12: Central Nervous System Chapter 12 Quiz CH13: Peripheral Nervous System Exam Quiz 3 (online) Exam 3 (online) Chapter 13 Quiz CH14: Autonomic Nervous System CH15: Special Senses (Eyes & Ears) Chapter 14 & 15 Quiz	Ex. 12-1, 12-2 Ex. 13-1, 13-2 Sheep Brain Dissection LAQ 9-10 (online) Ex. 14-2, 14-3, 14-4 Ex. 15-1, 15-2, 15-4
11 12 13	3/31 4/01 to 4/7 4/8 to 4/14 4/15 to 4/21 4/22 to 4/28	Chapter 11 Quiz CH12: Central Nervous System Chapter 12 Quiz CH13: Peripheral Nervous System Exam Quiz 3 (online) Exam 3 (online) Chapter 13 Quiz CH14: Autonomic Nervous System CH15: Special Senses (Eyes & Ears) Chapter 14 & 15 Quiz Withdraw Day (4/22)	Ex. 12-1, 12-2 Ex. 13-1, 13-2 Sheep Brain Dissection LAQ 9-10 (online) Ex. 14-2, 14-3, 14-4 Ex. 15-1, 15-2, 15-4 LAQ 11-12 (online)
11 12 13	3/31 4/01 to 4/7 4/8 to 4/14 4/15 to 4/21 4/22 to 4/28 4/29 to	Chapter 11 Quiz CH12: Central Nervous System Chapter 12 Quiz CH13: Peripheral Nervous System Exam Quiz 3 (online) Exam 3 (online) Chapter 13 Quiz CH14: Autonomic Nervous System CH15: Special Senses (Eyes & Ears) Chapter 14 & 15 Quiz Withdraw Day (4/22)	Ex. 12-1, 12-2 Ex. 13-1, 13-2 Sheep Brain Dissection LAQ 9-10 (online) Ex. 14-2, 14-3, 14-4 Ex. 15-1, 15-2, 15-4 LAQ 11-12 (online) Lab Practical 2 Review
11 12 13	3/31 4/01 to 4/7 4/8 to 4/14 4/15 to 4/21 4/22 to 4/28	Chapter 11 Quiz CH12: Central Nervous System Chapter 12 Quiz CH13: Peripheral Nervous System Exam Quiz 3 (online) Exam 3 (online) Chapter 13 Quiz CH14: Autonomic Nervous System CH15: Special Senses (Eyes & Ears) Chapter 14 & 15 Quiz Withdraw Day (4/22)	Ex. 12-1, 12-2 Ex. 13-1, 13-2 Sheep Brain Dissection LAQ 9-10 (online) Ex. 14-2, 14-3, 14-4 Ex. 15-1, 15-2, 15-4 LAQ 11-12 (online)

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: The College of the Mainland is committed to providing students with the necessary support and tools for success in their college careers. Our Tutoring Services, Library, Counseling, and Student Services offer support. 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 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 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 the 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: