



**BIOL2402.101C6**  
**Anatomy and Physiology II**  
**SUMMER 2025**  
**Monday through Thursday 11:00 am-1:20 pm, STEAM Building, Room 334**

**PowerPoint Lectures on course topics are located in the Content section of Brightspace.**

**Instructor Information:** Dr. Bytheway, [jbytheway@com.edu](mailto:jbytheway@com.edu) 409-933-8288; STE-325.19

**Student Hours and Location:** Monday and Wednesday 10:20 until 10:50. Faculty Office STE 325.19

**Required Textbook/Materials:**

**Lecture Textbook is online through Brightspace D2L**

- Marieb, E.N. & Hoehn, K., 2019. Human Anatomy and Physiology, 12th ed. Boston, MA; Pearson Education, Inc.
- To access the textbook go to Brightspace D2L: <http://com.brightspace.com>. COM Brightspace D2L will also be used for any course online activities, such as accessing lab handouts, reviews, or other course materials. In addition, Brightspace D2L will allow students to communicate with each other and the instructor.
- If you have any questions regarding course access or training, please contact the Distance Education Department ([www.com.edu/de/index.cfm](http://www.com.edu/de/index.cfm)) on extension 8476.

**Lab Manual – Can be purchased at COM Bookstore**

- Amerman, E., 2022. Exploring Anatomy & Physiology in the Laboratory, 4th edition. Englewood, Colorado, Morton Publishing Company ISBN-13: 978-1-61731-955-6. \*\*The lab manual was customized for COM A&P, and some pages will be missing.

**Scantrons**

- **Scantrons 881-E** are required for the lecture exams and will not be provided by the instructor. You can purchase them online or at the COM Bookstore.

**Course Description:** Anatomy and Physiology II is the second part of a two-course sequence. It is the study of structure and function of the human body and includes the following systems: endocrine, cardiovascular, lymphatic, respiratory, digestive (including nutrition), urinary (including fluid and electrolyte balance), and reproductive (including human development and genetics). Emphasis is on interrelationships among systems and regulation of physiological functions involved in maintaining homeostasis. **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. BIOL 2401 with a grade of "C" or better.

**Course Requirement:** The course requirement is to attend a two hour-twenty minute lecture/lab combination, Monday through Thursday. We will follow the Course Schedule which is shown below. Depending on class progression, inclement weather, etc., the schedule of material to be covered on the syllabus may change as we go through the semester. This will be indicated

verbally in class and if there are significant changes to the course, I will generate a revised syllabus. **It is your responsibility** to make sure you listen to syllabus changes in class and mark your syllabus accordingly.

If needed, I will provide announcements in Brightspace D2L prior to class time. Please make sure you check Brightspace D2L and your COM email before you come to class.

**Lecture:** Lecture format may include use of the whiteboard, PowerPoint slides, videos, film clips, photos, or animations. **Assigned textbook chapters are to be read prior to class.** PowerPoint lectures, announcements, documents, additional optional readings, etc., will be handed out in class or posted in Brightspace D2L. You are responsible for obtaining the course materials by downloading them to your device or printing them out and bringing them to class. **PowerPoint lectures are posted 3-24 hours prior to class and will remain visible on Brightspace D2L for two weeks. They are then removed. Make sure you download them before they are removed.**

Topics and concepts covered during lectures or included in the assigned reading will be included in exams.

**Laboratory:** The laboratory component of the course involves reinforcing concepts discussed in lecture using a variety of hands-on and visual approaches.

**Use of Artificial Intelligence:** The use of artificial intelligence (AI) can be a valuable tool for academic purposes and is permitted in this course as a supplementary resource for students. AI may assist with generating ideas, creating images, checking grammar, and improving writing skills and other class-related tasks, **but it should not be relied upon solely.** **Students are expected to demonstrate independent thinking and analysis** and use AI to supplement their work. Any work submitted must be the student's own, and using AI to generate entire assignments or portions of assignments is strictly prohibited and will result in academic consequences. To promote transparency and accountability, students must document their use of AI in their assignments, including the prompts or instructions they provided to the AI and any additional notes about the AI's output or their analysis. Plagiarism, including using AI to generate assignments, not only cheats the student out of learning but is considered a form of academic misconduct and will result in disciplinary action.

### ***Exams***

There are two lecture exams and one final comprehensive lecture exam. Each lecture exam may consist of multiple-choice, fill-in-the-blank, matching, true-false, and identification questions. Lecture exam dates are listed in the Course Syllabus Schedule. Exams **will not be permanently** returned to the student after testing (only scantrons); however, students will have an opportunity to review the exams.

**No electronic devices, including watches, earbuds or headphones are permitted during the exam. Hats, earbuds, headphones, and smart watches are to be removed prior to the exam.**

No exam grade will be dropped in this course. Exam grades are not curved however bonus points may be offered and applied to the exams.

Students will have 2 weeks, following the date of the return of an exam, to contact the course instructor regarding discrepancies. No further consideration will be given after this time.

Students requiring special accommodation for taking exams should contact the ADA office (information listed below in the syllabus). Students are individually responsible for scheduling their own exam times with the ADA office and **must notify me one week in advance of the arrangement**. This ensures I have enough time to get an exam copy over to the center.

### ***Quizzes***

There are four (4) mandatory quizzes. Additional mandatory quizzes (including pop quizzes) may be added at the discretion of the instructor. Unless you have a documented medical or logistical emergency you will not be able to make up a missed quiz. Each quiz may consist of multiple-choice, fill-in-the-blank, matching, and identification questions. The three quiz dates are listed on the Course Syllabus.

### ***Lab Practical Exams:***

There are two Lab Practical Exams. Both are administered in the lab and consist of identification using anatomical models, microscopic slides, photo images, and the Syndaver. Lab Practical exam dates are listed in the Course Syllabus Schedule.

### ***Lab Assignments/Exercises***

Lab assignments/exercises are excellent tools to reinforce what you have learned in lecture and help you to understand and retain the material. There are lab assignments each week that are due at the end of lab or per the discretion of the instructor (depending on the progression of the class/lab).

### **Determination of Course Grade/Detailed Grading Formula:**

Students progress will be assessed via

- **2 lecture exams and one Final Comprehensive exam**
- **2 lab practical exams**
- **Assignments**
- **4 quizzes**

### **GRADING POLICY**

10%	First Exam
15%	Second Exam
5%	Attendance and participation
5%	Assignments
10%	Quizzes
20%	Final Exam
15%	Lab Exam 1

### **Grading Scale**

A = 100-90
B = 89-80
C = 79-70
D = 69-60
F = 59-0

20% Lab Exam 2  
100% Total

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

**I** = may be assigned at the instructor's discretion per the college's incomplete policy.

**W** = withdrawal may be assigned per the college's withdrawal policy.

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

#### ***Late Work***

Lab assignments/exercises are due during the lab session or may be extended to the following lab session per the discretion of the instructor (depending on the progression of the class/lab). Missed assignments, with no prior notification by the student to the instructor, can be completed with a 5% decrease in total points for each missed day. If you've missed an assignment, please contact the instructor to discuss how you may complete it. Permission to make up missed assignments is at the discretion of the instructor.

#### ***Make-up Exam Policy***

**No make-up examinations, for Lecture or Lab, will be administered for this course without written medical or logistical (e.g., car accident) emergency documentation. The date of the Final Exam cannot be changed and must be taken on the assigned date.**

**\*\*If a student comes into the classroom 30 minutes after a quiz or exam has started (without prior notification) OR after a student or students have left the examination room, the student will not be permitted to take the exam and **no make-up exam will be administered**.**

#### ***Extra Credit***

Extra credit **is not** an option for this course.

#### **Attendance Policy:**

Students are expected to attend all class sessions as listed on the course calendar. These attendance policies apply to both lecture and lab.

- Attendance will be taken at the beginning of each class. Leaving early from class (without approval from the instructor) may result in an absence for that day.
- If you show up later than 15 minutes for either lecture or lab, you will be marked as absent.
- If you miss more than six (6) meetings during the semester, you may be dropped from the course.
- If you do have to miss class, course lecture materials are posted on Brightspace D2L, but it is your responsibility to obtain any additional notes from a classmate.
- If you know that you are going to miss a class, let me know in advance.

Students will receive one (1) point for each **fully-attended** class.

### 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.
- Check the college calendar for the last date to withdraw from a 16-week session.
- 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 me before making that decision. However, if you decide to drop the class, it is YOUR responsibility to withdraw by completing the proper document. You are still enrolled in the course until you have submitted the form.
- If you do not withdraw by the withdraw 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” or “F/N” for the class.

### 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 statements requiring monitoring and communication expectations via Brightspace D2L or other LMS.)

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.		Comprehensive Final Exam
3. Describe the interdependency and interactions of the systems.		Exam 1
4. Identify causes and effects of homeostatic imbalances.	CS	Urinalysis Lab
5. Apply appropriate safety and ethical standards.		Lab Safety Quiz
6. Locate and identify anatomical structures.		Lab Practical 1 & 2
7. Appropriately utilize laboratory equipment, such as microscopes, dissection tools, general lab ware, physiology data acquisition systems, and virtual simulations.		Lab Practical 2
8. Work collaboratively to perform experiments.	TW	Urinalysis Lab
9. Communicate results of scientific investigations, analyze data, and formulate conclusions.		Ex 19-2 Blood Typing
10. 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	Urinalysis Lab

### Academic Dishonesty:

- Each student is expected to do his/her own work and conduct themselves in an honest, professional, and mature manner.

- 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 COM Student Handbook.
- 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 COM 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 provided. If you continue to have questions after discussing your concern with me, please contact the Department Chair, Professor Abernathy at [sabernathy@com.edu](mailto:sabernathy@com.edu) or 409-933-8330.

### COURSE SCHEDULE (TENTATIVE SCHEDULE)

\* Lab Assignments are due at the end of lab or at the discretion of the instructor.

WK	DAYS	CHP	LECTURE	LAB *All assignments are due at the end of lab unless otherwise instructed
1	6/2	Ch 16	Lab Safety The Microscope Recap	Lab Safety Assignment The Microscope
	6/3		The Endocrine System	Exercise (Ex.) 16-1 Procedure (Proc) 1, Ex. 16-2 Proc 1
	6/4		The Endocrine System (cont.) Review for Quiz	Exercise (Ex.) 16-1 Procedure (Proc) 1, Ex. 16-2 Proc 1
	6/5	Ch 20	<b>Quiz 1 6/5</b> Cardiovascular System: Blood	Ex. 20-1 Proc 1&2, Ex. 20-2 Proc 1, Ex. 20-3 Proc 1 Ex. 20-4 Proc 1
2	6/9	Ch 20	Cardiovascular System: Blood (cont.)	Ex. 20-1 Proc 1&2, Ex. 20-2 Proc 1, Ex. 20-3 Proc 1 Ex. 20-4 Proc 1
	6/10	Ch 18	Cardiovascular System: The Heart	Ex. 18-1 Proc 1 Ex. 18-2 Proc 1, Ex. 18-3 Proc 1, Ex. 18-5 Proc 1
	6/11		Cardiovascular System: The Heart (cont.) Review for Exam	Ex. 18-1 Proc 1 Ex. 18-2 Proc 1, Ex. 18-3 Proc 1, Ex. 18-5 Proc 1
	6/12		<b>EXAM 1 6/12</b>	
3	6/16		Cardiovascular System: The Heart (cont.)	Ex. 18-1 Proc 1 Ex. 18-2 Proc 1, Ex. 18-3 Proc 1, Ex. 18-5 Proc 1
	6/17	Ch 19	Cardiovascular System: Blood Vessels: Arteries/Veins Review for Exam 1	Ex. 19-5 Proc 1 & 2

	6/18	Ch 19	Cardiovascular System: Blood Vessels: Arteries/Veins (cont.)	Ex. 19-5 Proc 1 & 2
	6/19		No class. Juneteenth	
4	6/23	Ch 21	Lymphatic System	Ex. 21-1 Proc 1 & 2, Ex. 21-2 Proc 1 (1-3), Ex. 21-3 Proc 1
	6/24		Lymphatic System: Immunity	Ex. 21-1 Proc 1 & 2, Ex. 21-2 Proc 1 (1-3), Ex. 21-3 Proc 1 (cont.)
	6/25		Review for Lab Practical	Review of Anatomical Models
	6/26		<b>LAB PRACTICAL 1 6/26</b>	
5	6/30	Ch 21 & 22	Lymphatic System (cont.) Respiratory System	Ex. 21-1 Proc 1 & 2, Ex. 21-2 Proc 1 (1-3), Ex. 21-3 Proc 1 Ex. 22-1 Proc 1 & 3, Ex. 23-2 Proc 1
	7/1	Ch 22	Respiratory System (cont.) Review for Lab Practical	Ex. 22-1 Proc 1 & 3,
	7/2	Ch 23	Digestive System	Ex. 23-2 Proc 1 Ex. 23-3 Proc 1
	7/3	Ch 23	<b>Quiz 2 7/3</b> The Digestive System	Ex. 23-2 Proc 1 Ex. 23-3 Proc 1
6	7/7	Ch 24	Nutrition	Ex. 24-1 Proc 1, Ex. 24-4 Proc 1
	7/8	Ch 25	The Urinary System	Ex. 25-1 Proc 1 Ex. 26-3 Proc 1
	7/9		The Urinary System (cont.)	
	7/10		<b>EXAM 2 7/10</b>	
7	7/14	Ch 26	Fluid Balance	Ex. 26-3 Proc 1
	7/15	Ch 26	Fluid Balance (cont.)	Ex. 26-3 Proc 1
	7/16	Ch 27	The Reproductive System: Male Review for Exam	Ex. 27-1 Proc 1, Ex. 27-2 Proc 1
	7/17		<b>Quiz 3 7/17</b>	
8	7/21	Ch 27	The Reproductive system: Male (cont.)	Ex. 27-1 Proc 1, Ex. 27-2 Proc 1
	7/22	Ch 27	The Reproductive System: Female	Ex. 27-1 Proc 1, Ex. 27-2 Proc 1
	7/23		Review for Lab Practical	

	7/24		<b>LAB PRACTICAL 7/24</b>	
9	7/28	Ch 27	The Reproductive System: Female (cont.)	Ex. 27-1 Proc 1, Ex. 27-2 Proc 1
	7/29	Ch 28	Birth & Human Development Review for Quiz	Ex. 28-1 Proc 1, Ex. 28-2 Proc 1, Ex. 28-3 Proc 3
	7/30	Ch 28	Birth & Human Development (cont.) Review for Quiz	Ex. 28-1 Proc 1, Ex. 28-2 Proc 1, Ex. 28-3 Proc 3
	7/31		<b>Quiz 4 7/31</b> Heredity	
10	8/4	Ch 29	Heredity	
	8/5	Ch 29	Heredity & Patterns of Inheritance	
	8/6		Review for Final Exam	
	8/7		<b>FINAL EXAM 8/7</b>	

### 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 should always act in a professional manner. Disruptive students will be held accountable according to college policy. Any violations of the Code of Conduct will result in a referral to the Office for Student Conduct and may result in dismissal from this class.



## Behavioral Expectations and Electronic Devices

Each student is entitled to an environment conducive to learning. Any situation that prevents students from learning or the instructor from teaching is a disruption. Please be respectful of your fellow students and the instructor by adhering to the following:

- Cell phone and ear bud use during lecture **IS NOT PERMITTED**. If I see violations of this rule, you will be asked to leave the class and you will not get credit for that day's work.
- Laptops and tablets are permitted during lecture, but ONLY to take notes.
  - First offense: a warning and you will be allowed to stay in class.
  - Additional offenses: you will be asked to leave the class/lab and receive an absence for the day.
  - Repeated violations of this policy may result in your removal from the course.
- During exams and quizzes, electronic devices are strictly prohibited. If any electronic device is in a student's possession during an exam or quiz, the exam/quiz will be taken from the student, and he/she will receive a grade of zero (0) for that exam/quiz.
- Getting up and leaving class during lecture, outside of a class break and without prior notification, will result in an absence for that day and will count towards the six absences rule set out for the semester.
- Talking excessively during class lecture and or discussing inappropriate topics is prohibited and will be dealt with harshly.
- Due to fire code room capacity and lab safety reasons, friends, spouses, and children are not allowed in the classroom.

## 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_Handbook_2024-2025_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 with 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, Student Accessibility Services Coordinator  
Phone: 409-933-8919



Email: [AccessibilityServices@com.edu](mailto:AccessibilityServices@com.edu)

Location: COM Doyle Family Administration Building, 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 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 5-week session is June 30. The last date to withdraw from the 10-week session is July 29. The last date to withdraw for the 2nd 5-week session is August 1.

**FN Grading:** The FN grade is issued in cases where *failure is 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. The Student Success Center recommends that Instructors refer students to the Early Alert Program throughout the semester if they have 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 to see what assistance can be offered to meet your academic goals.

#### **Resources to Help with Stress:**

If you are experiencing stress or anxiety about your daily living needs, including food, and housing, or 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](mailto:deanofstudents@com.edu) or [communityresources@com.edu](mailto: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, or any other basis prohibited by law. Retaliation against anyone involved in the complaint process is a violation of College District policy.