

BIOL 2402 Anatomy and Physiology II Fall 2023

Information Item	Information		
Instructor:	Courtney Bolton, DPT, MS, BS		
Section # and CRN:	Lecture Z1 / Lab Z91		
Office Location:	Online		
Office Phone:	(251) 359-6020		
Email Address:	<u>clbolton@pvamu.edu</u>		
Office Hours:	Please email me to schedule an appointment via Zoom.		
Mode of Instruction:	Online Instruction Via ZOOM		
Course Location:	Online/Virtual via ZOOM		
Class Days & Times:	TBD		
Catalog Description:	An introductory course examining the organization of a human body and the mechanisms for maintaining homeostasis. Topics include metabolism, the cardiovascular, lymphatic, respiratory, digestive, urinary, and reproductive systems. Designed for students who will pursue a career in nursing and allied health fields.		
Prerequisites:	Completion of Anatomy and Physiology I - BIOL 2401 is recommended.		
Co-requisites:	BIOL 2042 Lab		
Required Text(s):	ISBN: 9781265866563 – Saladin 9e: Connect w/ Proctorio. (Bookstore)		
Recommended Text(s):	Study Guide to Human Anatomy and Physiology 2- Harrell, Michael M.S. (Amazon) Cliff Notes: Anatomy and Physiology Quick Review- Phillip E. Pack Anatomy and Physiology for Dummies- Erin Odya OpenStax		

Online Course Notes	 During online ZOOM discussions, students will turn on computer camera. It is expected that students will utilize laptop or desktop computer to complete all course work. All correspondence must occur via student's canvas account ONLY.

General Course Information Table

It is an asynchronous learning environment. Students working Alone, without their teacher. Think Assignments. The teacher facilitates learning by pushing instructions and resources out to students for them to work on independently with no direct or immediate interaction with the teacher. This requires teachers to anticipate needs and make instructions as comprehensive as possible. • Assign hands-on activities that are easy for students to do at home with materials that are readily available • Facilitate student sensemaking via independent thinking, reading, and research • Provide opportunities for students to self-assess and autonomy to choose between independent remediation activities or enrichment activities.

Please note that this course requires effective time management by students in order to remain on schedule.

Students should plan to allocate, at a minimum, the time required for the course when offered in an oncampus/ face to face setting. As a rule of thumb, it is recommended that a student spend 2 hours of study for each 1 hour in class. Therefore, for a 4.0 credit hour course (16 weeks of face to face: Lecture and lab), a minimum of 12 contact hours of study per week is required.

The course is comprised of 16 Chapters, and multiple assignments organized to correspond to a standard semester. The course is NOT self-paced. Each Chapter includes the following learning activities: 1) assigned mandatory readings from the electronic E-Book. Each Smartbook chapter has an estimated completion time however, this time is often exceeded. 2. Depending on the chapter, completion of LearnSmart quizzes, quizzes, or discussions are required and 3) Daily assignments that state the daily/weekly activities and due dates.

Discussion Q&A

Weekly discussion and Q&A will be available to assist with discussing topics or challenges in the course.

	Course Objectives (CO) or Student Learning Outcomes (SLO)
SLO 1	Use anatomical terminology to identify and describe locations of major organs of each system covered
SLO 2	Demonstrate a critical understanding of anatomical physiological processes
SLO 3	Analyze quantitative and empirical biomedical datasets and graphs.
SLO 4	Perform Oral and Written communication of biomedical terms relative to the human body.

SLO 5	Collaboratively work through physiological case studies and group exercises.
SLO 6	Appropriately utilize virtual laboratory equipment, such as microscopes, physiology data acquisition systems, and virtual simulations.

Major Course Requirements

Method of Determining Final Course Grade

Course Grade Requirement	Value	Total
1. Lecture Exams	4 Lecture exams at 100 pts ea.	30%
2. Laboratory Practical Exams, Oral Exam	5 Practical exams at 100 pts ea.	30%
3. SmartBook Assignments	9 SmartBook	10%
4. Course Assignments (Connect Online assignments, homework and lab assignments)		10%
5. Case Study (Group and Written Assignment)	2 Individual Case Study	5%
6. Quizzes	14 quizzes	5%
7. Comprehensive Final Exam		10%
Total:		100 %

Course Grade Requirement Table

Grading Criteria and Conversion:

- A=100-90%
- $B=89-80\%$
- $C=79-70\%$
- $D=69-60\%$
- F = 59% or below

All assignments will be due the day prior to each exam.

Late Assignment Policy

A submission is labeled Late when it has been submitted past the due date. Only assignments with a status of Late will be affected by the Late Submission policy. The late policy will be applied to a submission when it is graded. Late assignments will reduce 5 points per day late.

Grades in Canvas

Your instructor will update the online grades each time a grading session has been complete—typically 7 days following the completion of an activity. This includes exam and writing assignments.

Assignment Title or Grade Requirement	Description
1. Lecture Exams	Minimum of four lecture exams will be given during the semester. Exams will consist of multiple-choice, short answer and essay questions. The exams will measure the student's ability to process anatomy and physiology lexicon, identify the structural similarities and differences, and process the physiological processes. In addition, students will relate concepts to clinical application and communicate their thoughts in written format. The lecture exams count for 30% of your grade.
2. Laboratory Practical Exams	Minimum of four practical laboratory exams will be given during the semester. The practical examinations consist of identification of anatomical parts and physiological functions. Models and animal specimen will be utilized to test your knowledge of these systems. <u>The laboratory exams accounts for 30% of your grade.</u>
3. SmartBook Assignments	LearnSmart helps students succeed by providing a personalized learning path that's based on responses to questions (right or wrong), as well as how confident they feel about the answers they provide. The program also encourages the retention of the material by identifying concepts that students are likely to forget and directing them back to portions of the e-book to help them solidify concepts. <u>The SmartBook assignments will be due each week and count as 10% of your grade.</u>
4. Course Assignments (Connect Online assignments, Virtual Lab)	<u>On-line Assignments:</u> A collection of questions discussing scientific concepts on the chapter by using composition, labeling, classification, sequencing, true and false, matching, and essay question.
	<u>Lung Laboratory Assignments</u> : Students are engaged in scientific inquiry by performing individual data analysis and write-ups. The students will complete written exercises targeting mechanical functions and physiology of the cardiovascular, respiratory, and muscular functions. Students will observe videos of the physiologic modifications of the respiratory cycle associated with voluntarily increasing and decreasing blood carbon dioxide content by holding breath and hyperventilating. Students will qualitatively determine changes in respiratory minute volume by recording and analyzing EMGs from respiratory muscles of the thorax. This assignment will be referenced against the Association of American College and Universities Empirical and Quantitative rubric. <u>This will count 10% of your grade</u> .

Detailed Description of Major Assignments:

5. Case Study (Group and Written Assignment)	Students will measure the student's ability to research, analyze and communicate information for a given case study/scientific topic. Each student will be assigned to a group to discuss the requirements of the case study. Each member of the group will be responsible for a written portion of the case study and providing a part for the oral presentation. The topics will require students to research information and compare data. After which, they will collaboratively assemble an oral presentation using Prezi to be assessed by their peers and professor. This assignment will be referenced against the Association of American College and Universities Written and Oral communication rubric, Teamwork rubric and Peer Evaluation Rubric (Herreid, C.F., 2007). <u>This will count 5% of your grade.</u>
7. Comprehensive Final Exam	A comprehensive (all chapters covered for the semester) exam given at the end of each semester. <u>The final exam accounts for 10% of your grade.</u> The final exam schedule is set by the University. See attached final exam schedule for exact date. * <u>Do not schedule any activity during the final exam period (*see above dates).</u>

Detailed Description of Major Assignments Table

Biology 2402 Lecture and Laboratory Schedule

Week	Date	<u>Online Lecture</u>	Online Laboratory	Online Assignments

Prior to		<u>Orientation</u>	Orientation	Orientation
<u>course</u>				
1	8/21-8/29	Chapter 18 Circulatory System: Blood	Syllabus/Pre-Test &/ Chapter 18 The Circulatory System	SmartBook - Chapter 18
			Lab Safety Forms/ Register for Connect/ Chapter 18	Assignment Chapter 18
2	8/28-9/4	Chapter 19 Circulatory System: Heart	Connect Virtual Lab	SmartBook - Chapter 19 Assignment -Chapter 19
3	9/4-9/10	Chapter 20 Circulatory System: Vessels and Circulation	Connect Virtual Lab	SmartBook - Chapter 20 Assignment - Chapter 20
4	9/11-9/17	Lecture Exam I (18, 19, 20)	Lab Exam I (18, 19, 20)	Oral Exam (Flow of Blood through the Heart)

5	9/18-9/24	Chapter 21 Lymphatic System SmartBook - Chapter 21	Connect Virtual Lab	Assignment Chapter 21
6	9/25-10/01	Chapter 22 Respiratory System	Connect Virtual Lab	Assignment Chapter 22
7	10/02-10/08	Lecture Exam II (21, 22)	Lab Exam II (21, 22)	
8	10/09-10/15	Chapter 23 Urinary System	Connect Virtual Lab	SmartBook - Chapter 23 Assignment 6- Chapter 23
9	10/16-10/22	Chapter 25 Digestive System	Connect Virtual Lab	SmartBook – 25 Assignment -Chapters 25
11	10/23-10/29	Lecture Exam III (23, 25)	Lab Exam III (23, 25)	
12	10/30-11/5	Case Study: Heart	Lung Volume	Happy Homecoming Week
13	11/6-11/12	Chapter 27 Male Reproduction	Connect Virtual Lab	SmartBook - Chapter 27
				Assignments-Chapter 27
14	11/13-11/19	Chapter 28 Female Reproduction	Connect Virtual Lab	SmartBook-Chapter 28

				SmartBook- Chapter 28
15	11/20-11/28	Lecture Exam IV (27, 28)	Lab Exam IV (27, 28)	Happy Thanksgiving Week!
16	12/1-12/7	Final Exams Week		

Student Support and Success

John B. Coleman Library

The library and its partners have as their mission to provide resources and instructional material in support of the evolving curriculum, as a partner in Prairie View A&M University's mission of teaching, research, and service and to support the University's core values of access and quality, diversity, leadership, relevance, and social responsibility through emphasis on ten key areas of service. It maintains library collections and access both on campus, online, and through local agreements to further the educational goals of students and faculty. <u>https://www.pvamu.edu/library/</u> Phone: 936-261-1500

University Tutoring Center

The Center offers tutoring via peer tutoring. The services include workshops (i.e., Save My Semester, Recalculate Your Route), seminars (i.e., Tools You Can Use: TI-84), group review sessions (i.e., College Algebra Topic Reviews, GRE Preparation), group study opportunities (i.e., TSIA, HESI, Study Break, Exam Cram), and test-taking strategies (How to take Notes, Study Buddy, 5 Day Study Guide). The Learning Curve is a nationally certified tutoring program through the National Tutoring Association. The peer tutors are trained and certified by the coordinator each semester. Location: J.B. Coleman Library Rm. 307. Phone: 936-261-1561

The Student Academic Success Center

The Student Academic Success Center is designed to help Prairie View students in their second year and beyond navigate towards graduation by providing the following services: Academic Advisement, Targeted Tutorials for Personalized Learning, Campus-Wide Referrals, and Academic & Social Workshops. Location: J.B. Coleman Library Rm. 306. Phone: 936-261-1040

Writing Center

The Writing Center provides student consultants on all aspects of the writing process and a variety of writing assignments. Writing Center consultations assist students in such areas as prewriting, brainstorming, audience awareness, organization, research, and citation. Students taking on-line courses or courses at the Northwest Houston Center or College of Nursing may consult remotely or by email. Location: Hilliard Hall Rm. 121. Phone: 936-261-3724

Student Counseling Services

The Student Counseling Services unit offers a range of services and programs to assist students in maximizing their potential for success: short-term individual, couples, and group counseling, as well as

crisis intervention, outreach, consultation, and referral services. The staff is licensed by the State of Texas and helps students who are dealing with academic skills concerns, situational crises, adjustment problems, and emotional difficulties. Information shared with the staff is treated confidentially and in accordance with Texas State Law. Location: Owens-Franklin Health Center Rm. 226. Phone: 936-261-3564

Testing

The Department of Testing administers College Board CLEP examinations, the HESI A2 for pre-nursing majors, LSAT for law school applicants and MPRE for second-year law students, the Experiential Learning Portfolio option, the Texas Success Initiative (TSI) Assessment, which determines college readiness in the state, and exam proctoring, among other service such as SAT and ACT for high school students. Phone: 936-261-3627

Office of Disability Services

As a federally-mandated educational support unit, the Office of Disability Services serves as the repository for confidential disability files for faculty, staff, and students. For persons with a disability, the Office develops individualized ADA letters of request for accommodations. Other services include: learning style inventories, awareness workshops, accessibility pathways, webinars, computer laboratory with adapted hard and software, adapted furniture, proctoring of non-standardized test administrations, ASL interpreters, ALDs, digital recorders, livescribe, Kurtzweil, and a comprehensive referral network across campus and the broader community. Location: Evans Hall Rm. 317. Phone: 936-261-3585

Veteran Services

Veterans Services works with student veterans, current military and military dependents to support their transition to the college environment and continued persistence to graduation. The Office coordinates and certifies benefits for both the G.I. Bill and the Texas Hazlewood Act. Location: May Hall Rm. 118. Phone: 936-261-3563

Office for Student Engagement

The Office for Student Engagement delivers comprehensive programs and services designed to meet the co-curricular needs of students. The Office implements inclusive and accessible programs and services that enhance student development through exposure to and participation in diverse and relevant social, cultural, intellectual, recreational, community service, leadership development and campus governance. Location: Memorial Student Center Rm. 221. Phone: 936-261-1340

Career Services

Career Services supports students through professional development, career readiness, and placement and employment assistance. The Office provides one-on-one career coaching, interview preparation, resume and letter writing, and career exploration workshops and seminars. Services are provided for students at the Northwest Houston Center and College of Nursing in the Medical Center twice a month or on a requested basis. Distance Learning students are encouraged to visit the Career Services website for information regarding services provided. Location: Evans Hall Rm. 217. Phone: 936-261-3570

University Rules and Procedures

Disability Statement (Also See Student Handbook):

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact Disability Services, in Evans Hall, Room 317, or call 936-261-3585/3.

Academic Misconduct (See Student Handbook):

You are expected to practice academic honesty in every aspect of this course and all other courses. Make sure you are familiar with your Student Handbook, especially the section on academic misconduct. Students who engage in academic misconduct are subject to university disciplinary procedures.

Forms of Academic Dishonesty:

- 1. Cheating: deception in which a student misrepresents that he/she has mastered information on an academic exercise that he/she has not mastered; giving or receiving aid unauthorized by the instructor on assignments or examinations.
- 2. Academic misconduct: tampering with grades or taking part in obtaining or distributing any part of a scheduled test.
- 3. Fabrication: use of invented information or falsified research.
- 4. Plagiarism: unacknowledged quotation and/or paraphrase of someone else's words, ideas, or data as one's own in work submitted for credit. Failure to identify information or essays from the Internet and submitting them as one's own work also constitutes plagiarism.

Nonacademic Misconduct (See Student Handbook)

The university respects the rights of instructors to teach and students to learn. Maintenance of these rights requires campus conditions that do not impede their exercise. Campus behavior that interferes with either (1) the instructor's ability to conduct the class, (2) the inability of other students to profit from the instructional program, or (3) campus behavior that interferes with the rights of others will not be tolerated. An individual engaging in such disruptive behavior may be subject to disciplinary action. Such incidents will be adjudicated by the Dean of Students under nonacademic procedures.

Sexual Misconduct (See Student Handbook):

Sexual harassment of students and employers at Prairie View A&M University is unacceptable and will not be tolerated. Any member of the university community violating this policy will be subject to disciplinary action.

Title IX Statement

Prairie View A&M University (PVAMU) is committed to supporting students and complying with the Texas A&M University System non-discrimination policy. It seeks to establish an environment that is free of bias, discrimination, and harassment. If you experience an incident of sex- or gender-based discrimination, including sexual harassment, sexual assault or attempted sexual assault, we encourage you to report it. While you may talk to a faculty member about an incident of misconduct, the faculty member must report the basic facts of your experience to Ms. Alexia Taylor, PVAMU's Title IX Coordinator. If you would like to speak with someone who may be able to afford you privacy or confidentiality, there are individuals who can meet with you. The Title IX Coordinator is designated to handle inquiries regarding non-discrimination

policies and can assist you with understanding your options and connect you with on- and off-campus resources. The Title IX Coordinator can be reached by phone at 936-261-2123 or in Suite 013 in the A.I. Thomas Administration Building.

Class Attendance Policy (See Catalog for Full Attendance Policy)

Prairie View A&M University requires regular class attendance. Attending all classes supports full academic development of each learner whether classes are taught with the instructor physically present or via distance learning technologies such as interactive video and/or internet.

Excessive absenteeism may result in a student's course grade being reduced or in assignment of a grade of "F". Absences are accumulated beginning with the first day of class during regular semesters and summer terms.

Student Academic Appeals Process

Authority and responsibility for assigning grades to students rests with the faculty. However, in those instances where students believe that miscommunication, errors, or unfairness of any kind may have adversely affected the instructor's assessment of their academic performance, the student has a right to appeal by the procedure listed in the Catalog and by doing so within thirty days of receiving the grade or experiencing any other problematic academic event that prompted the complaint.

TECHNICAL CONSIDERATIONS

Minimum Recommended Hardware and Software:

- Intel PC or Laptop with Windows 7; Mac with OS X; Smartphone or iPad/Tablet with Wi-Fi
- High speed Internet access
- 8 GB Memory
- Hard drive with 320 GB storage space
- 15" monitor, 800x600, color or 16 bit
- Sound card w/speakers
- Microphone and recording software
- Keyboard & mouse
- Most current version of Google Chrome or Firefox

Note: Be sure to enable Java & pop-ups in the Web browser preferences

Participants should have a basic proficiency of the following computer skills:

- Sending and receiving email
- A working knowledge of the Internet
- Proficiency in Microsoft Word (or a program convertible to Word)
- Proficiency in the Acrobat PDF Reader
- Basic knowledge of Windows or Mac O.S.

Netiquette (online etiquette):

Students are expected to participate in all discussions and virtual classroom chats as directed. Students are to be respectful and courteous to others on discussions boards. Foul or abusive language will not be tolerated.

Technical Support:

Students should go to <u>https://mypassword.pvamu.edu/</u> if they have password issues. The page will provide instructions for resetting passwords along with whom to contact if login issues persist. For other technical questions regarding eCourses, call the Center for Instructional Innovation and Technology Services at 936-261-3283

Communication Expectations and Standards:

Emails or discussion postings will receive a response from the instructor, usually in less than 48 hours. Urgent emails should be marked as such. Check regularly for responses.

Discussion Requirement:

Online courses often require minimal to no face-to-face meetings. However, conversations about the readings, lectures, materials, and other aspects of the course can take place in a seminar fashion. This will be accomplished by the use of the discussion board. The exact use of discussion will be determined by the instructor.

It is strongly suggested that students type their discussion postings in a word processing application and save it to their PC or a removable drive before posting to the discussion board. This is important for two reasons: 1) If for some reason your discussion responses are lost in your online course, you will have another copy; 2) Grammatical errors can be greatly minimized by the use of the spell-and-grammar check functions in word processing applications. Once the post(s) have been typed and corrected in the word processing application, it/they should be copied and pasted to the discussion board.

Course Orientation:

Dear Student:

You are registered for BIOL 2402 Anatomy and Physiology I I–YXX (CRN# LECTURE), (CRN#LAB) <u>asynchronous course</u>. It is an asynchronous learning environment. Students working Alone, without their teacher. Think Assignments. The teacher facilitates learning by pushing instructions and resources out to students for them to work on independently with no direct or immediate interaction with the teacher. This requires teachers to anticipate needs and make instructions as comprehensive as possible. • Assign handson activities that are easy for students to do at home with materials that are readily available • Facilitate student sensemaking via independent thinking, reading, and research • Provide opportunities for students to self-assess and autonomy to choose between independent remediation activities or enrichment activities.

cited: STEMscopes : <u>https://www.stemscopes.com/resources/stemscopes-synchronous-and-asynchronouslearning-guide.pdf</u> (Links to an external site.)

Students are <u>REQUIRED to purchase</u> CONNECT ACCESS CODE Saladin 9e: Connect w/ Proctorio ISBN: 9781265864088 (Bookstore)

This will include Electronic textbooks (E-BOOK), Smartbook, Anatomy and Physiology Revealed (APR), Anatomy and Physiology Practice Atlas, Virtual Laboratories, quizzes, and exams.

Remember: We will be working through CANVAS, all materials must be turned into CANVAS. I will not accept assignments through email.

Minimum Technology Requirements for Biology courses

To participate in PVAMU Biology asynchronous courses, you need this technology:

Required Hardware

- A computer (desktop/laptop) with a webcam that is less than 5 years old will work. Check on your <u>Computer Compatibility Check</u> (Links to an external site.)
- Speakers/headphones/earbuds for listening to audio or videos presented in courses.
- Webcam for interacting in course activities that require video feedback from students (such as VoiceThread), video test proctoring (such as Proctorio), or other third-party tools. <u>The webcam will be required for assignments and exams.</u>

Required Software

The following software is required :

An Internet Browser, such as Google Chrome preferred. (See Internet Browser section for more information.)

• Google Chrome (latest version) - <u>Download</u> (Links to an external site.)

Adobe Acrobat Reader (latest version) - <u>Download.</u> (Links to an external site.)

ZOOM link be canvas Internet Connection A stable High-speed Internet connection <u>Orientation videos</u> Canvas orientation

Navigating Connect and Completing Assignments (Links to an external site.)

Proctorio orientation video (Links to an external site.)

There are additional orientation exercises in WEEK 1.

- Student Introduction
- Smartbook 2.0 Orientation
- Anatomy and Physiology Revealed Orientation
- Biology Lab Safety contract

Netiquette Guidelines Netiquette is a set of rules for behaving properly online. Your instructor and fellow students wish to foster a safe online learning environment. All opinions and experiences, no matter how

different or controversial they may be perceived, must be respected in the tolerant spirit of academic discourse. You are encouraged to comment, question, or critique an idea but you are not to attack an individual. Working as a community of learners, we can build a polite and respectful course community. The following netiquette tips will enhance the learning experience for everyone in the course:

- Do not dominate any discussion.
- Give other students the opportunity to join in the discussion.
- Do not use offensive language. Present ideas appropriately.
- Be cautious in using Internet language. For example, do not capitalize all letters since this suggests shouting.
- Popular emoticons such as \odot or / can be helpful to convey your tone but do not overdo or overuse them.
- Avoid using vernacular and/or slang language. This could possibly lead to misinterpretation. Never make fun of someone's ability to read or write.
- Share tips with other students.
- Keep an "open-mind" and be willing to express even your minority opinion. Minority opinions must be respected.
- Think and edit before you push the "Send" button. Do not hesitate to ask for feedback.
- Using humor is acceptable

Enjoy your semester,

Dr. Courtney Bolton Email: clbolton@pvamu.edu