



**PRAIRIE VIEW  
A&M UNIVERSITY**

<b>BIOLOGY 1054 P02 (CRN: 27282) - ANATOMY AND PHYSIOLOGY I LECTURE BIOLOGY 1054 P62 (CRN: 27287) - ANATOMY AND PHYSIOLOGY I LABORATORY Spring 2019</b>		
<b>Instructor Name:</b>	<i>Dr. Carla J. Whittaker</i>	
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	Prairie View, TX 77446	
<b>Office Hours:</b>	<b>Mondays and Wednesdays 4:00 PM – 4:50 PM; or Immediately After Class</b>	
<b>Course Location:</b>	<b><i>E. E. Obanion Science Building Room 103 (Lecture) and 311 (Laboratory)</i></b>	
<b>Class Meeting Days &amp; Times:</b>	<b>Lecture: Mondays and Wednesdays 5:00 PM – 5:50 PM Laboratory: Mondays and Wednesdays 6:00 PM – 7:50 PM</b>	
<b>Course Abbreviation and Number:</b>	<b>Lecture: Biology 1054 - 27282 Sec. P02 Anatomy and Physiology I Laboratory: Biology 1054 - 27287Sec. P62 Anatomy and Physiology I</b>	
<b>Catalog Description:</b>	<b>Anatomy and Physiology;</b> (2-4) Credit semester hours each. The structure and functions of the human body. The structure of each of the system demonstrated by models, charts, and animal dissections with their functions studied by experiments. Laboratory fee required. ** (BIOL 2401)	
<b>Prerequisites:</b>	<b>It is desirable to have successfully completed Biology 1054 before taking Biology 1064.</b> You must exhibit an adequate understanding of associated scientific terminology and principles of general biology, and general chemical concepts.	
<b>Co-requisites:</b>		
<b>Access to Learning Resources:</b>	PVAMU Library: phone: (936) 261-1500; web: <a href="http://www.tamu.edu/pvamu/library/">http://www.tamu.edu/pvamu/library/</a> University Bookstore: phone: (936) 261-1990; web: <a href="https://www.bkstr.com/Home/10001-10734-1?demoKey=d">https://www.bkstr.com/Home/10001-10734-1?demoKey=d</a>	



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**Course Goals:** Students will use microscopes, microscopic slides, diagrams, models, physiological processes and dissection of animal specimens during their study of the following systems: integumentary, skeletal, muscular, nervous (including special senses), and endocrine systems.

**Course Overview:**

1. Understand the functions of the body parts and their inter-relationships.
2. Acquire the ability to apply physiological principles to anatomical situations and develop logical clinical solutions.
3. Think creatively about current medical problems.
4. Develop a basis for continued study in your major field.

**Course Objectives/Accrediting Body (SACS) Standards Met:**

1. Identify and summarize the steps of the scientific method and recognize their role in the context of a laboratory experiment.
2. List, identify, and classify the cellular organic macromolecules, specify the monomers for each, and explain their relevance to human structure and function.
3. Explain basic cellular functions such as protein synthesis, cellular respiration, DNA replication, and cell division.
4. Recognize the anatomical structures, explain physiological functions, and recognize and explain the principle of homeostasis applied to the integumentary, nervous, endocrine, muscular and skeletal systems.
5. Oral and Written communication of biomedical terms relative to the human body.
6. Collaborative work through physiological case studies.

**Student Learning Outcomes:**

	<b>Upon successful completion of this course, students will be able to:</b>	<b>Program Learning Outcome # Alignment</b>	<b>Core Curriculum Outcome Alignment</b>
<b>1</b>	Identify and summarize the steps of the scientific method and recognize their role in the context of a laboratory experiment.	#1	Critical Thinking, Communication
<b>2</b>	List, identify, and classify the cellular organic macromolecules, specify the monomers for each, and explain their relevance to human structure and function.	#1	
<b>3</b>	Explain basic cellular functions such as protein synthesis, cellular respiration, DNA replication, and cell division.	#2, #3	Communication

<b>4</b>	Recognize the anatomical structures, explain physiological functions, and recognize and explain the principle of homeostasis applied to the integumentary, nervous, endocrine, muscular and skeletal systems.	#4	
<b>5</b>	Perform Oral and Written communication of biomedical terms relative to the human body.	#5	Communication
<b>6</b>	Collaboratively work through physiological case studies.	#5	Teamwork
<b>7</b>	Demonstrate a critical understanding of biological physiological processes	#4	
<b>8</b>	Analyze quantitative and empirical biomedical datasets and graphs.	#5	Empirical and Quantitative

### **Course Evaluation Methods**

This course will utilize the following instruments to determine student grades and proficiency of the learning outcomes for the course.

**Exams** – written tests designed to measure knowledge of presented course material

**Exercises** – written assignments designed to supplement and reinforce course material

**Projects** – web development assignments designed to measure ability to apply presented course materials.

### **Examinations**

#### **Lecture:**

Four major lecture exams will be given during the semester. These exams will consist of cover information covered in the lectures and assigned chapters in the textbook. The exams may consist of multiple choice, K-type (multiple-multiple choice), matching, diagrams, fill-in-the-blank, true-false, short answer and/or essay questions.

Except for documented emergencies, there will be no makeup exams for a missed lecture exam. Should a student be permitted to take a make-up exam due to extenuating circumstances, the student must take the make-up exams within one week from the missed exam. Each student is responsible for the materials missed during an absence from class. Excused or unexcused absences do not release the student from obtaining the assignments that are missed during an absence. **The lecture exams count for 30% of your grade.**

#### **Laboratory:**

Four major practical laboratory exams will be given during the semester. The practical examinations consist of identification of anatomical parts and physiological functions. Models, microscopic slides, and/or animal specimen will be utilized to test your knowledge of these systems. Except in documented emergencies, there will be no makeup exams for a missed lab exam. If a student is



allowed to take a make-up exam, all make-up exams must be taken within one week from the missed laboratory exam. **The laboratory exams count for 30% of your grade.**

**Exam Policy:**

Exams should be taken as scheduled. No makeup examinations will be allowed except under documented emergencies (See Student Handbook). **Each student must provide their own Scantron B during the lecture exams.**

**Assignments:**

**Class participation:** The following items will be used to assess the participation grade: Assignments (lecture, laboratory, online), quizzes (lecture/laboratory), and BIOPAC exercises. **The class participation grade will count 10% of your grade.**

**On-line Assignments:** will be answering a collection of questions discussing scientific concepts on the chapter by using composition, labeling, classification, sequencing, true and false, matching and essay question.

**Biopac Laboratory Assignments:** Students are engaged in scientific inquiry by performing in group data collection, analysis and write-ups. The students will perform exercises targeting circulatory system, respiratory system, muscular function, brain function, ANS, exercise physiology and neurophysiology.

**Quizzes:** During the semester, quizzes may be given in the lecture and laboratory. Dates for the quizzes will be announced in class. Quizzes may be will be given at the beginning or end of the class. **Please arrive to class on time.** If a student fails to take a quiz, the grade for the missed quiz is zero.

**Lab Notebook:** The student will maintain a lab notebook which is a compilation of all notes and handouts presented in lecture and the laboratory. **This will count 5% of your grade.**

**Case studies: (This will count 10% of your grade).**

Students will be required to write two case study reports: an individual report and a collaborative (group) report. The topics for the case study reports should be about a disease or disorder that is related to an organ system that will be covered during the course. Information used to write the case study reports should be obtained from recent research articles or peer reviewed articles on the related topic covered in class. For both papers, **there should be a minimum of four references cited in the body of the paper.** Two of the articles may come from articles obtained from the internet. The remaining references may be obtained from scientific journals and science books. The report should be written in the MLA or CBE format. The report must be typed using 12 font, double spaced, and written in your own words. The references used to write the report must be cited in the body of the paper and cited on the "Works Cited Page". Those reports that are determined to be plagiarized will receive a grade of zero. The topics for the papers should be approved by the instructor. The **individual report** is to be submitted to the instructor at the **beginning of class on Wednesday, February 27, 2019. Late papers will not be accepted!** **Students should not submit case study reports via email.** The collaborative groups will present their case study reports orally in class. The written collaborative group case study report will be submitted on the day that the group is scheduled to present their oral presentation. The dates for the oral presentations will be assigned in class.



**Mid-Term Examination:** There will be a mid-term examination scheduled for the lecture and laboratory sections. The mid-term exam schedule is set by the University. The dates of the mid-term lecture exam and the mid-term laboratory exam will be announced in class.

**Final Exam:** A comprehensive final exam is given at the end of each semester. The final exam accounts for 10% of your grade. The final exam schedule is set by the University. \*Do not schedule any activity during the final exam period.

## COURSE CONTENT

### Unit I: Organization of the Body

- Chapter 1 – Major Themes of Anatomy and Physiology
- Chapter 2 – The Chemistry of Life
- Chapter 3 – Cellular Form and Function
- Chapter 4 – Genetics and Cellular Function
- Chapter 5 – Histology

### Unit II: Support and Movement

- Chapter 6 – The Integumentary System
- Chapter 7 – Bone Tissue
- Chapter 8 – The Skeletal System
- Chapter 9 – Joints
- Chapter 10 – The Muscular System
- Chapter 11 – Muscular Tissue

### Unit III: Integration and Control

- Chapter 12 – Nervous System
- Chapter 13 – The Spinal Cord, Spinal Nerves, and Somatic Reflexes
- Chapter 14 – The Brain and Cranial Nerves
- Chapter 15 – The Autonomic Nervous System and Visceral Reflexes
- Chapter 16 – Sense Organs

## Grading Matrix

Instrument	Value (points or percentages)	Total
Lecture exams	4 Lecture exams at 100 points each.	30%
Laboratory Practical Exams	4 Practical exams at 100 points each	30%
Class Participation: Lecture/Lab Quizzes, Lecture/ Laboratory Assignments (Including Online Assignments), BIOPAC Exercises	100 points each	10%



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Laboratory Notebook		5%
CASE STUDY PRESENTATION	INDIVIDUAL (100 GROUP (100 POINTS))	10%
Comprehensive Final Exam	100 points	15%

**Grade Determination:**

- A = 100 – 90pts;
- B = 89 – 80pts;
- C = 79 – 70pts;
- D = 69 – 60pts;
- F = 59pts or below

**BIOL 1054 Tentative Lecture and Laboratory Schedule**

Week	Lecture	Laboratory
1	First Class Day <b>(1/14/19)</b>	
	Class Orientation/ Syllabus/Pre-Test/Atlas A Chapter 1 – Major Themes of Anatomy and Physiology <b>(1/16/19)</b>	Syllabus/Laboratory Safety Training/ Contracts/
2	<b>Holiday</b>	
	Chapter 2 – The Chemistry of Life	Lab Exercise 1 - 2/ <b>BIOPAC Lesson 11</b>
3	Chapter 3 - Cellular Form and Function	Lab Exercise 3 - Microscopy
	Chapter 4 – Genetics and Cellular Function	Lab Exercise 4 – Cell Structure and Function
4	<b>Lecture Exam 1</b> (Chapters 1-4, Atlas A) <b>(2/4/19)</b>	<b>Laboratory Exam 1 (2/6/19)</b>
5	Chapter 5 - Histology	Lab Exercise 6
	Chapter 5 - Histology	Lab Exercise 6
6	Chapter 6 – The Integumentary System	Lab Exercise 7
	Chapter 6 – The Integumentary System; Chapter 7 – Bone Tissue	Lab Exercise 7
7	Chapter 7 - Bone Tissue	Lab Exercise 8 – Skeletal System
	Chapter 8 – The Skeletal System	Lab Exercise 9
8	<b>Lecture Exam 2</b> (Chapters 5 – 6) <b>(3/4/19)</b>	<b>Laboratory Exam 2 – Histology and Integumentary System (3/6/19)</b>
9	<b>SPRING BREAK (March 12 – 16, 2019)</b>	
10	Chapter 8 – The Skeletal System	Lab Exercises 10 - 11
	Chapter 9 - Joints	Lab Exercise 14 - 15
11	Chapter 10 – The Muscular System	Lab Exercise 16 -17



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	<b>Lecture Exam 3 (Chapters 7 – 10) (4/1/19)</b>	<b>Lab Exam 3 (4/3/19)</b>
	Chapters 12 - 16	Lab Exercises 20 - 22
13	Chapters 12 - 16	Lab Exercises 20 - 22
	Chapters 12 - 16	Lab Exercises 20 - 22
14	<b>Lecture Exam 4 (4/22/19)</b>	<b>Lab Exam 4 (4/24/19)</b>
	<i>Case Studies</i>	<i>Case Studies</i>
15	<i>Case Studies</i>	<i>Case Studies</i>
	<i>Case Studies</i>	<i>Case Studies</i>
16	<b>Final Exam Review (4/29/19)</b>	<i>Case Studies</i>
16 - 17	<b>Comprehensive Final Exam (5/1/19)</b>	

\* **Items in italics will be used for assess for compliance in foundational core areas.**

(The above schedule is tentative and is subject to change. Any changes that are made to the above schedule will be announced in class. Any changes in exam or lab exam dates will be announced in class).

## University Rules and Procedures

### Disability statement (See Student Handbook):

Students with disabilities, including learning disabilities, who wish to request accommodations in class should register with the Services for Students with Disabilities (SSD) early in the semester so that appropriate arrangements may be made. In accordance with federal laws, a student requesting special accommodations must provide documentation of their disability to the SSD coordinator.

### 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.***

### **Attendance Policy:**

Prairie View A&M University requires regular class attendance. Excessive absences will result in lowered grades. Excessive absenteeism, whether excused or unexcused, 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.**

**Absences on Religious Holy Days-** In accordance with Texas education Code, section 61.003, subdivision (7), student may be absence from class for the observance of a religious holy day will be permitted to take missed examinations and complete missed assignments provided the student has notified the instructor of the planned absence in writing and receipt of notification has been acknowledged by the instructor in writing.

"A religious holy day means a holy day observed by a religion whose place of worship is exempt from property taxation under the Texas Tax Code, section 11.20"

### **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 Undergraduate Catalog and by doing so within thirty days of receiving the grade or experiencing any other problematic academic event that prompted the complaint.

### **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.





### **Center for Academic Support**

The Center for Academic Support (CAS) 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 Tutoring Center 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

### **COMPASS**

The Center for the Oversight and Management of Personalized Academic Student Success (COMPASS) 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.

### **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. Location: Hilliard Hall 121

### **CLASSROOM MANAGEMENT:**

1. **Do not bring food, tobacco, drinks or chewing gum into the classroom or in the laboratory.**
2. **Turn off all cell phones, i-pods, pagers and other electronic devices prior to entering the classroom.** These items must be turned off and out of sight during class periods, quizzes and examinations! Do not use these items to answer calls, to view and/or to send text messages during class periods, quizzes, labs, or examinations.
3. **Do not remove models or model parts from the building.**
4. Replace all models and equipment to the assigned places after each laboratory use. Place your stool/chair under your laboratory position.
5. **Leave the laboratory and lecture rooms clean.** Place paper and refuse in the designated receptacles and not in the table sinks.
6. **Class begins when the instructor enters the classroom and closes the door to the classroom.** All students are expected to be in your seats at that time. All extraneous conversations should be discontinued at the time the instructor enters the classroom.
7. **Please, do not engage in extraneous activities or conversations while the instructor is lecturing.**
8. **Each student is expected to remain for the entire class period.** Students



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leaving class prior to the end of the class period, without getting permission from

the instructor, will receive one absence.

9. No baggy clothing that allows undergarments to be shown will be permitted in the classroom!
11. No tank tops and bare midriffs are allowed in the classroom.
12. Pant length should come below the knee. (Short pants are not permitted in the laboratory).
13. **Students are not allowed to wear “open toed” shoes in the laboratory.**
14. You are responsible for any equipment assigned to you.
15. Please, do not bring visitors or children into the classroom.