

# **SYLLABUS**

## BIOL 3014 Anatomy and Physiology I Fall 2019

**Instructor:** Lane, Jr., Cleveland O.

Section # and CRN: P01 (13148) ;P81(13152), P83 (13647)

Office Location: E.E. Obanion Science Building, Suite 430V

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Office Hours: Tuesday and Thursday 11:00am - 1:00 pm, by appointment

Mode of Instruction: Face to Face

Course Location: P01: Room A103, P81: Room 313, P83 Room 313

Class Days & Times: P01: MW, 11:00-11:50 pm; P81: MW, 1 pm – 2:50 pm, MW 6:00-7:50 pm

Catalog Description: This is a lecture/laboratory course in Physiology and Anatomy. The study of physiology

and physiology are essential to understanding the human body. Lecture and laboratory exercises have been designed to provide an in-depth knowledge of human structure and function. A working theme throughout the course will emphasize the concept that what the body is capable of doing depends intimately on how it is constructed, and the body's construction gives a strong indication of what it does. The physiological principle of homeostasis will be utilized to show how the "normal" interaction of structure and function is achieved and maintained by dynamic counterbalancing forces. This is an introductory course, and will serve as a foundation for students pursuing careers in the biomedical

sciences.

Prerequisites: BIOL 1015 General Biology I, BIOL 1025 General Biology II

Co-requisites:

**Required Texts:** 

Human Anatomy and Physiology (11th Edition), Elaine N. Marieb/ Katja Hoehn

**OpenTxt: Anatomy and Physiology** 

Saladin 8<sup>th</sup> edition Connect software

Recommended Texts: Openstax,

## **Student Learning Outcomes:**

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

4	Recognize the anatomical structures, explain physiological functions, and recognize and explain the principle of homeostasis applied to the integumentary, nervous, endocrine,	#4	
	muscular and skeletal systems		
5	Perform Oral and Written communication of biomedical terms	#5	Communication
	relative to the human body		
6	Collaboratively work through physiological case studies	#5	Teamwork
7	Demonstrate a critical understanding of biological physiological	#4	
	processes		
8	Analyze quantitative and empirical biomedical datasets and	#5	Empirical and
	graphs		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** – Each lecture and laboratory exam will focus on measuring the students understanding of the physiological processes and anatomical structures of the human anatomy.

**Lecture:** Minimum of four lecture exams will be given during the semester. Exams will consist of multiple-choice and short answer questions. The exams will measure the student's ability to process anatomy and physiology lexicon, identify the structural similarities and differences, process physiological processes. In addition relate concepts to clinical application and communicate their thoughts in written format. **The lecture exams count for 35% of your grade.** 

**Laboratory:** Minimum of four practical laboratory exams will be given during the semester. One laboratory practical will be oral format. 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.

The laboratory exams accounts for 35% of your grade.

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

<u>Biopac Laboratory Assignments</u>: Students are engaged in scientific inquiry by performing in group data collection, analysis and write-ups. The students will perform exercises targeting muscular function, brain function, ANS, exercise physiology and neurophysiology. <u>This will count 10% of your grade.</u>

## **Projects**

## Case studies/Biological Topic:

Students will collaboratively engage an assigned scientific topic discussed in the course. The group is expected to written and oral presentation of their case study to the class on the assigned day. This will count 10% of your grade.

Comprehensive Final Exam is given at the end of each semester. <u>The final exam</u> <u>accounts for 10% of your grade.</u> The final exam schedule is set by the University. See attached final exam schedule for exact date.

\*Do not schedule any activity during the final exam period (\*see above dates).

## **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 **Laboratory Exams** – practical hands on exams designed to supplement and reinforce course material **Biweekly guizzes** – designed to reinforce student daily reading/reviewing of course material

**Grading Matrix** 

Instrument	Value (	Total
Lecture Exams	4 Exams (100 each)	35%
Laboratory Exams	4 Exams (100 each)	35%
Assignments/Quizzes(Onli ne, Laboratory Assignments, Reaction Time, EOG, EEG Biopacs, case studies)	(100 each)	10%
Project	1 Project (100 each)	10%
Comprehensive Final	1 Exam (100 each)	10%
Total:		100%

#### Grade Determination: Will be determined for the course:

A = 100 - 90%

B = 89 - 80%

C = 79 - 70%

D = 69 - 60%

F = 59 or below

# **Biology 3014 Lecture and Laboratory Schedule (Tentative)**

Week	<u>Laboratory</u>	<u>Lecture</u>	Online Assignments
1	Syllabus/Register for Connect/	Pre-Test/Syllabus /Atlas A	Chapter 1
	Human Body video	General Orientation to	
		Human Anatomy	
	Safety Forms/ BIOPAC Lesson 11	Chapter 2	Chapter 2
		The Chemistry of Life	
2	Exercise 2 Organs, Systems and	Chapter 2	Assignment 1
	Organization( Review)	The Chemistry of Life	Chapters 1 and 2
	Labor Day		
	General Assembly	Chapter 3	Chapter 3
		Cellular Form and Function	•
3	Exercise 3 Microscopy	Chapter 3	
		Cellular Form and Function	
	Exercise 4 Cell structure and	Chapter 4 Genetics and	Chapter 4

	Function	Cellular Function	Assignment 2 Chapters 3 and 4
4	Exercise 6 Tissues	Chapter 4 Cellular Function	•
	Lab Exam I	Lecture Exam I (Atlas A,2,3,4)	
5	Exercise 6 Tissues	Chapter 5 Histology	Chapter 5
	Exercise 6 Tissues	Chapter 5 Histology	Assignment 3 Chapters 4 and 5
6	Exercise 7	Chapter 6 Integumentary System	Chapter 6
	Lab Exam II (Histology & Integumentary System)	Lecture Exam II (5,6)	
7	Exercise 8 Skeletal system	Chapter 7,8 Bone Tissue and Skeletal System	Chapter 7,8
	Exercise 9,11	Chapter 7,8 Bone Tissue and Skeletal System	Assignment 4 Chapters 6,7,8
8	Exercise 10	Chapter 9 Joints	Chapter 9
	Exercise 14,15	Midterm Lecture Exam (7,8,9)	
9	Lab Exam III	Chapter 10 and 11 Muscular System and Muscular tissue	Assignment 5 Chapter 9
	Exercise 16,17	Cont. Chapter 10 Chapter 11	
10	BIOPAC EMG 1	Cont. Chapter 10 Chapter 11	Assignment 6 Chapter 10
	BIOPAC EMG 2	Cont. Chapter 10 Chapter 11	Chapter 10-11
11	Lab Exam IV	Lecture Exam IV	
	Assignment 7 Chapter 12	Assignment 8 Chapter 13	
12	BIOPAC EEG 1	Chapter 12 Nervous Tissue Chapter 13 Spinal Cord, Spina Nerves, and Somatic Reflexes Chapter 14 Brain and Cranial Nerves Chapter 15 Autonomic Nerves System Chapter 16 Sense Organs	Chapter 12-16
	BIOPAC EOG 1	Cont. Chapter 12-16	
13	Exercise 20,21,22	Cont. Chapter 12-16	Assignment 9 Chapter 14-16
	Thanksgiving Day	Thanksgiving Day	
14	Dissection	Cont. Chapter 12-16	
	Lab Exam V	Exam V 12-16	
15	Projects Projects	Projects Projects	
10	•	•	
16	Final Exams	Final Exams	

## 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

## **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.

## **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.

#### 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.

#### **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, Safari, Internet Explorer or Firefox

Note: Be sure to enable Java & pop-ups

### 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 <a href="https://mypassword.pvamu.edu/">https://mypassword.pvamu.edu/</a> if they have password issues. The page will provide instructions for resetting passwords and contact information if login issues persist. For other technical questions regarding eCourses, call the Office of Distance Learning 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 accomplish 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 should be copied and pasted to the discussion board.