PVAMU Course Syllabi
Biology 1054 Anatomy and Physiology I

Department of
Biology
College of
Arts and Sciences

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Office Hours: M,T,W,TH 2:00 P.M. –3:00 P.M.

Course Location: New Science Building: Lecture RM 101 Laboratory: RM 311

Class Meeting Days & Times:

**Part Lecture:

Time	Day	Room Location
9:30-10:20 a.m.	T-TH	NSCI. 101

**Part Laboratory:

Time	Day	Room Location
8:00 – 9:50 am	M-W	NSCI. 311

Course Abbreviation and Number: Biology 1054 Lecture – 10612. Sec. P01 Anatomy and Physiology,
Biology 1054 Laboratory – 11038. Sec. P61 - Anatomy and Physiology

Catalog Description: Biology 1054. Anatomy and Physiology I; (2-4) 4 Credit semester hours. 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***)***

Prerequisites:
Co-requisites:

Required Text: Bundle:9780077548339
Anatomy & Physiology (Saladin, 6th ed.)
Anatomy & Physiology Lab
On line access code (Connect)

Recommended Text: Electronic Books. Go Green!! www.mhhe.com/ebooks for details.

Access to Learning Resources: PVAMU Library:
phone: (936) 261-1500;
web: http://www.pvamu.edu/pages/3585.asp

University Bookstore:
phone: (936) 261-1990;
web: https://www.bkstr.com/Home/10001-10734-1?demoKey=d

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 Outcomes:

At the completion of this course, the student will be able to satisfactorily:

1. Identify and summarize the steps of the scientific method and recognize their role in the context of a laboratory experiment (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;
3. Explain basic cellular functions such as protein synthesis, cellular respiration, DNA replication, and cell division (Communication);
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. Perform Oral and Written communication of biomedical terms relative to the human body (Communication);
6. Collaboratively work through physiological case studies (Teamwork);
7. Demonstrate a critical understanding of biological physiological processes;
8. Analyze quantitative and empirical biomedical datasets and graphs (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 – 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 30% 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 30% of your grade.

Learnsmarts
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. **The Learnsmarts will be due each week and count 10% 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.

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 muscular function, brain function, ANS, exercise physiology and neurophysiology. **This will count 10% of your grade.**

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

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. The final exam accounts for 10% of your grade. 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).**

Critical Thinking, Empirical and Quantitative Core Assessment
Reaction Time Biopac (Lesson 11) assignment will measure the students ability to observe the effects of learning and physiological process on reaction times. It will also measure their ability to compare reaction times with two presentation schedules: fixed intervals and pseudo-random interval datasets. Lastly, they will calculate statistics of group mean, variance and standard deviation. This assignment will be referenced against the Association of American College and Universities Empirical and Quantitative rubric.

Teamwork, Oral and Written Communication

Case Study/Scientific Topic Core Assessment 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).

Example of Scientific Topic is a comparison of Nervous system disorders the students will be responsible for knowing and communicating the history, effected population, discovery and treatment of the disorder.

Grading Matrix

Instrument	Value (points or percentages)	Total
Lecture Exams	4 Lecture exams at 100 points ea.	30%
Laboratory Practical Exams	4 Practical exams at 100 pts each	30%
Learnsmart	16 Learnsmarts	10%
Assignment (Online, Laboratory Assignments, Reaction Time, EOG, EEG Biopacs)	10 Assignments	10%
CASE-STUDY PRESENTATION	GROUP	5%
CASE-STUDY	Individual	5%
Comprehensive Final Exam	100 points	10%

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

BIOL 1054 Lecture and Laboratory Schedule

Week	Laboratory	Lecture	Online Assignments
1	Syllabus/Register for Connect/ Human Body video	Pre-Test/Syllabus /Atlas A General Orientation to Human Anatomy	LearnSmart Chapter 1
	Safety Forms/ *BIOPAC Lesson 11*	Chapter 2 The Chemistry of Life	LearnSmart Chapter 2
2	Exercise 2 Organs, Systems and Organization	Chapter 2 The Chemistry of Life	Assignment 1 Chapters 1 and 2
	General Assembly	Chapter 3 Cellular Form and Function	Learnsmart Chapter 3
3	Exercise 3 Microscopy	Chapter 3 Cellular Form and Function	
	Exercise 4 Cell structure and Function	Chapter 4 Genetics and Cellular Function	Learnsmart Chapter 4 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	Learnsmart Chapter 5
	Exercise 6 Tissues	Chapter 5 Histology	Assignment 3 Chapters 4 and 5
6	Exercise 7	Chapter 6 Integumentary System	Learnsmart 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	Learnsmart 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	Learnsmart Chapter 9
	Exercise 14,15	Midterm Lecture Exam (7,8,9)	
9	Lab Exam III	Chapter 10 and 11 Muscular System and	Assignment 5 Chapter 9

		Muscular tissue	
	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	Learnsmart 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, Spinal Nerves, and Somatic Reflexes Chapter 14 Brain and Cranial Nerves Chapter 15 Autonomic Nerves System Chapter 16 Sense Organs	Learnsmart 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	*Case Studies*	*Case Studies*	
	Case studies	Review Day	
16	Final Exams	Final Exams	

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

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 <u>first day of class</u>.

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.