BIOL 1054 Anatomy and Physiology I
Summer 2020

Instructor: Arielle Scott-Turner, DO
Section # and CRN: Z01(33009)/Z61 (33010)
Office Location: E.E. Obanion Science Building
Office Phone: 936-261-3161
Email Address: arscottturner@pvamu.edu
Office Hours: Mon./Wed. 8:00-9:00 am, Tues./Thurs. 4:00-5:00 pm via ZOOM.

Mode of Instruction: Internet: Asynchronous

Course Location: Z01: Online, Z61: Online
Class Days & Times: No specific class day or times. (All lectures will be recorded and listed on eCourses homepage to view at your leisure.) Q&A M/W 9:00-10:00 am and 5:00 - 6:00pm.

Catalog Description: An introductory course examining the organization of a human body and the mechanisms for maintaining homeostasis. Topics include chemistry of life, cell and tissue structure, metabolism, skeleton, muscular, nervous, endocrine, and integumentary system. Designed for students who will pursue a career in nursing and allied health fields.

Required Texts: **McGraw Hill Connect online access code**: Includes eBook, Anatomy and Physiology Revealed, Practice Atlas, and all required assignments. [Click here](#) to purchase code directly from McGraw and register for the course. Or purchase code at discounted rate from the University Bookstore ISBN: Saladin 8e: Connect AC – 9781264588480

Student Learning Outcomes:

<table>
<thead>
<tr>
<th>Program Learning Outcome #</th>
<th>Core Curriculum Outcome Alignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upon successful completion of this course, students will be able to:</td>
<td></td>
</tr>
</tbody>
</table>

1

1

1

1

1

1

1

1

1

1

1

1

1

1

1
Please note that this course requires effective time management by students in order to remain on schedule. Students should plan to allocate, at minimum, the time required for the course when offered in an on-campus/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: Lectures and Labs), a minimum of 12 contact hours of study per week is required. Considerably more time will be required if the course is offered for 5 weeks.

The course consists of 16 Chapters, and multiple assignments organized to correspond to a standard semester. The course is NOT self-paced; approximately three chapters must be completed each week during the five week summer semester. 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.

**C Course Evaluation Methods**

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

<table>
<thead>
<tr>
<th>1</th>
<th>Identify and summarize the steps of the scientific method and recognize their role in the context of a laboratory experiment</th>
<th>#1</th>
<th>Critical Thinking, Communication</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>List, identify, and classify the cellular organic macromolecules, specify the monomers for each, and explain their relevance to human structure and function</td>
<td>#1</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Explain basic cellular functions such as protein synthesis, cellular respiration, DNA replication, and cell division</td>
<td>#2, #3</td>
<td>Communication</td>
</tr>
<tr>
<td>4</td>
<td>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</td>
<td>#4</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Perform Oral and Written communication of biomedical terms relative to the human body</td>
<td>#5</td>
<td>Communication</td>
</tr>
<tr>
<td>6</td>
<td>Collaboratively work through physiological case studies</td>
<td>#5</td>
<td>Teamwork</td>
</tr>
<tr>
<td>7</td>
<td>Demonstrate a critical understanding of biological physiological processes</td>
<td>#4</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Analyze quantitative and empirical biomedical datasets and graphs</td>
<td>#5</td>
<td>Empirical and Quantitative</td>
</tr>
</tbody>
</table>
Exams – Each lecture and laboratory exam will focus on measuring the students understanding of the physiological processes and anatomical structures of the human anatomy. Exams will be administered via Connect, Respondus or Examity on the dates listed below. Although students will be provided with a window of time to complete their exam, each exam will be timed and must be completed in one sitting once they press start. No exam resets permitted.

Lecture: A minimum of four lecture exams will be given during the summer I session. 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, 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: A minimum of four practical laboratory exams will be given during the summer I session. One laboratory practical will be oral format. The practical examinations consist of identification of anatomical parts and physiological functions. Mostly online 2D and 3D models will be utilized to test your knowledge of these systems. The laboratory exams accounts for 30% of your grade.

LearnSmarts: Enhance student success by providing a personalized learning pathway based on responses to questions (right or wrong), and evaluates how confident a student feels 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 before starting each chapter throughout the week and will count as 10% of your grade.

Connect On-line Assignments: A collection of questions discussing scientific concepts on the chapter by using composition, labeling, classification, sequencing, true and false, matching and essay question to reinforce knowledge gained from lectures and independent reading.

Connect Virtual Labs: Aids in student preparation for lab, increases efficiency, and provides the ability to retain more fundamental skills necessary for a successful laboratory experience. Whether used solely as an online solution for lab replacement or skill preparation, these simulations will help students learn the practical and conceptual skills of anatomy. The virtual labs will also assess student comprehension and provide feedback.

Discussion Requirement for online courses: There will be no required face to face meetings on campus (online courses only). However, we will participate in conversations about the readings, lectures, materials, and other aspects of the course in a true seminar fashion. We will accomplish this by use of the discussion board. Students are required to log-on to the course website often to participate in dis-
**Grading Matrix**

<table>
<thead>
<tr>
<th>Instrument</th>
<th>Value (points or percentages)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lecture Exams</td>
<td>4 Lecture exams at 100 points ea.</td>
<td>30%</td>
</tr>
<tr>
<td>Laboratory Practical Exams</td>
<td>4 Practical exams at 100 pts each</td>
<td>30%</td>
</tr>
<tr>
<td>Learnsmart</td>
<td>15 Learnsmarts</td>
<td>10%</td>
</tr>
<tr>
<td>Assignment</td>
<td>15 Assignments</td>
<td>10%</td>
</tr>
<tr>
<td>(Online, Discussion, Virtual Laboratory,)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Case Studies</td>
<td>~ 4 Case Studies</td>
<td>10%</td>
</tr>
<tr>
<td>Comprehensive Final Exam</td>
<td>100 points</td>
<td>10%</td>
</tr>
</tbody>
</table>

Grade Determination:

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

**Late Assignment Policy**

A submission is considered **late** when it has been submitted past the assigned due date and time. The late policy will be applied to a submission when it is graded. Late assignment grades will decrease by 10% per day late.

**Biology 1054 Lecture and Laboratory Schedule**

<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Lecture Topics</th>
<th>Online Assignments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>5/25</td>
<td>Register for Connect</td>
<td>Memorial Day *Attend Orientation Zoom Meeting at 10am or view recording.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Orientation Video</td>
<td>Connect :1st Lab - Virtual Labs Tutorial</td>
</tr>
<tr>
<td>Date</td>
<td>Topic</td>
<td>Assignments</td>
<td></td>
</tr>
<tr>
<td>------</td>
<td>-------</td>
<td>-------------</td>
<td></td>
</tr>
</tbody>
</table>
| 5/27 | Chemistry of Life (2) Readings 2.1, 2.3, 2.4 | **Lab Assignments**  
Connect Virtual Labs: Chemical Composition of Cells - Test for Proteins  
Connect Virtual Labs: Chemical Composition of Cells - Test for Starch  
Connect Virtual Labs: Chemical Composition of Cells - Test for Sugars  
**Lecture Assignments**  
LearnSmart Chapter 2  
Assignment Chapter 2 |
| 5/28 | Cellular Form and Function (3) Readings 3.1, 3.2, 3.3, 3.4 | **Lab Assignments**  
Connect Virtual Labs: Microscopy - Operation of Bright-field Microscope  
Connect Virtual Labs: Osmosis - Tonicity in Red Blood Cells  
**Lecture Assignments**  
LearnSmart Chapter 3  
Ch. 3 Assignment |
| 5/29 | Genetics and Cellular Function (4) Readings 4.1, 4.2, 4.3 | **Lab Assignments**  
Connect Virtual Labs: DNA Biology and Technology - Isolation of DNA  
**Lecture Assignments**  
LearnSmart Chapter 4  
Assignment Chapter 4 |
| 2 | 6/1 | **Lab Assignments**  
Develop a Histology Atlas (Instructions available on eCourses)  
**Lecture Assignments**  
LearnSmart Chapter 5  
Assignment Chapter 5 |
| 6/2 | EXAM 1 (Ch. 1-4) | **LAB PRACTICAL I** |
| 6/3 | Integumentary System (6) Readings 6.1, 6.2, 6.3, 6.4 | **Lab Assignments**  
Practice Atlas Integumentary Assignment  
Skin Exfoliation/Moisturizing eCourse Discussion  
**Lecture Assignments**  
LearnSmart Chapter 6  
Assignment Chapter 6 |
<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Readings/Assignments</th>
</tr>
</thead>
<tbody>
<tr>
<td>6/4</td>
<td>Bone Tissues (7)</td>
<td>Readings 7.1,7.2,7.3, 7.5</td>
</tr>
<tr>
<td></td>
<td>Lab Assignments</td>
<td>APR Skeletal Assignment</td>
</tr>
<tr>
<td></td>
<td>Lecture Assignments</td>
<td>LearnSmart Chapter 7 Assignment Chapter 7</td>
</tr>
<tr>
<td>6/5</td>
<td>Bone Tissues (7)</td>
<td>Readings 7.1,7.2,7.3, 7.5</td>
</tr>
<tr>
<td></td>
<td>Case Study/Discussion: Osteoporosis</td>
<td></td>
</tr>
<tr>
<td>6/8</td>
<td>Skeletal System (8)</td>
<td>Readings 8.1, 8.2, 8.3, 8.4, 8.5</td>
</tr>
<tr>
<td></td>
<td>Lab Assignments</td>
<td>APR Skeletal Assignment</td>
</tr>
<tr>
<td></td>
<td>Lecture Assignments</td>
<td>LearnSmart Chapter 8 Assignment Chapter 8</td>
</tr>
<tr>
<td>6/9</td>
<td>Skeletal System (8)</td>
<td>Readings 8.1, 8.2, 8.3, 8.4, 8.5</td>
</tr>
<tr>
<td></td>
<td>Lab Quiz- Bone Tissue and Skeletal System (review ch. images)</td>
<td></td>
</tr>
<tr>
<td>6/10</td>
<td>Joints (9)</td>
<td>Readings 9.1,9.3</td>
</tr>
<tr>
<td></td>
<td>Lab Assignments</td>
<td>Joints APR Lab Assignment</td>
</tr>
<tr>
<td></td>
<td>Lecture Assignments</td>
<td>LearnSmart Chapter 9 Assignment Chapter 9</td>
</tr>
<tr>
<td>6/11</td>
<td>Lecture Exam 2 (Ch. 5-8)</td>
<td>LAB PRACTICAL II</td>
</tr>
<tr>
<td>6/12</td>
<td>Muscle Tissue (10)</td>
<td>Readings 10.1,10.2,10.3,10.4,10.5</td>
</tr>
<tr>
<td></td>
<td>Lab Assignments</td>
<td>Connect Virtual Labs: Skeletal Muscle - Electrical Stimulation</td>
</tr>
<tr>
<td></td>
<td>Lecture Assignments</td>
<td>LearnSmart Chapter 10 APR Assignment Chapter 10</td>
</tr>
<tr>
<td>6/15</td>
<td>Muscle Tissue (10)</td>
<td>Readings 10.1,10.2,10.3,10.4,10.5</td>
</tr>
<tr>
<td></td>
<td>Quiz- Muscle Tissue</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lab Assignments</td>
<td>Connect Virtual Labs: Electromyography - Motor Unit Recruitment</td>
</tr>
<tr>
<td></td>
<td>Lecture Assignments</td>
<td>LearnSmart Chapter 11 Assignment Chapter 11</td>
</tr>
<tr>
<td>Date</td>
<td>Topic</td>
<td>Readings</td>
</tr>
<tr>
<td>---------</td>
<td>--------------------------------------------</td>
<td>---------------------------</td>
</tr>
<tr>
<td>6/17</td>
<td>Muscle System (11)</td>
<td>11.1, 11.2, 11.3, 11.4</td>
</tr>
<tr>
<td>6/18</td>
<td>Nervous Tissue (12)</td>
<td>12.1, 12.2, 12.3, 12.4</td>
</tr>
<tr>
<td>6/19</td>
<td>Exam 3 (Ch. 9-11)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6/23</td>
<td>Brain, Cranial Nerves (14)</td>
<td>14.1, 14.2, 14.3, 14.4, 14.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6/24</td>
<td>Brain, Cranial Nerves (14)</td>
<td>14.1, 14.2, 14.3, 14.4, 14.5</td>
</tr>
<tr>
<td></td>
<td>Autonomic Nervous System and Visceral reflexes (15)</td>
<td>15.1</td>
</tr>
<tr>
<td>6/25</td>
<td>Sense Organs (16)</td>
<td>16.1, 16.3, 16.4, 16.5</td>
</tr>
<tr>
<td>6/26</td>
<td>Exam 4 (Ch. 12-16)</td>
<td></td>
</tr>
</tbody>
</table>
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.

Minimum Technology Requirements for Biology courses
To participate in PVAMU Biology online/hybrid courses, you need this technology:
Required Hardware

- A computer (desktop/laptop) or mobile device (tablet) that is less than 5 years old will work.
  - Check on your [Computer Compatibility Check](#).
- 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 Voice-Thread), video test proctoring (such as Respondus Monitor, Examity), or other third-party tools. **Webcam will be required for exams.**
- You need to watch video and load Respondus lockdown browser on your computer or tablet.

Required Software

The following software is required:
An Internet Browser, such as Mozilla Firefox and Google Chrome preferred. (See Internet Browser section for more information.)
- Mozilla Firefox (latest version) - [Download](#)
- Google Chrome (latest version) - [Download](#)
- Adobe Acrobat Reader (latest version) - [Download](#)
- ZOOM

Internet Connection

A stable High speed Internet connection
Class assignments will be available Tuesday, May 26, 2020.

Orientation videos

- [Navigating Connect and Completing Assignments](#)
- [Getting Started with McGraw-Hill’s Connect & SmartBook](#)

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 [https://mypassword.pvamu.edu/](https://mypassword.pvamu.edu/) 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 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 should be copied and pasted to the discussion board.