BIOL 1054 Anatomy and Physiology I
Spring 2020

Instructor: Prof. Awadh Binhazim, PhD.
Section # and CRN: P03 (29185)
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Email Address: aabinhazim@pvamu.edu
Office Hours: By appointment.
Mode of Instruction: Face to Face
Course Location: Room 311
Class Days & Times: P03: TTH, 2:00 – 2:50: pm; P63: TTH, 3:00-4:50 pm
Catalog Description: Human structure, physiology, organ systems, and related principles. 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.

Prerequisites:
Co-requisites:
Required Texts: Anatomy and Physiology: The Unity of Form and Function 8th Edition by Kenneth Saladin

Student Learning Outcomes:

<table>
<thead>
<tr>
<th>Program Learning Outcome #</th>
<th>Core Curriculum Outcome Alignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>#1 Identification of the scientific method and recognize their role in the context of a laboratory experiment</td>
<td>Critical Thinking, Communication</td>
</tr>
<tr>
<td>#1 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>
</tr>
<tr>
<td>#2, #3 Explain basic cellular functions such as protein synthesis, cellular respiration, DNA replication, and cell division.</td>
<td>Communication</td>
</tr>
<tr>
<td>#2 Recognize the anatomical structures, explain functional anatomy and physiological functions, and recognize and explain the principle of homeostasis applied to the integumentary, nervous, endocrine, muscular and skeletal systems</td>
<td>#4</td>
</tr>
<tr>
<td>#5 Perform Oral and Written communication of biomedical terms relative to the human body</td>
<td>Communication</td>
</tr>
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</table>
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 (2 exams, a midterm, and final exam) 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 50% of your grade (exam 1 – 10%; midterm – 15%; exam 3 – 10%; final exam – 15%).

Laboratory: Minimum of four practical laboratory exams and/or assignments will be given during the semester. Laboratory practical will be oral format. The practical examinations consist of identification of anatomical parts and physiological functions. Models and other specimens will be utilized to test your knowledge of these systems. The laboratory practical exams accounts for 30% of your grade.

Exercises and Assignments – written assignments will be given that are designed to supplement and reinforce course material. Exercises will include answering a collection of questions discussing scientific concepts on the chapter by using composition, labeling, classification, sequencing, true and false, matching and other types of questions. The Exercises and Assignments accounts for 10% of your grade.

Case studies/Biological Topic:
Students will collaboratively engage an assigned scientific topic discussed in the course. The group is expected to do a written and give an 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 15% 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).

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 a
partner to work with and 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 to be assessed by their peers and professor.

Example of Scientific Topic is a comparison of cardiovascular system disorders the students will be responsible for knowing and communicating the history, effected population, discovery and treatment of the disorder. The presentations will be done during the last 2 – 3 weeks of the semester.

**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>2 Lecture exams at 100 points ea.</td>
<td>20%</td>
</tr>
<tr>
<td>Laboratory Practical Exams</td>
<td>4 to 5 Practical exams at 100 pts each</td>
<td>30%</td>
</tr>
<tr>
<td>Midterm</td>
<td>100 points</td>
<td>15%</td>
</tr>
<tr>
<td>Assignment (Online, Laboratory Assignments)</td>
<td>Chapter assignments at 100 pts</td>
<td>10%</td>
</tr>
<tr>
<td>Case study presentations</td>
<td>Paired student presentations at 100 points</td>
<td>10%</td>
</tr>
<tr>
<td>Comprehensive Final Exam</td>
<td>100 points</td>
<td>15%</td>
</tr>
</tbody>
</table>

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

**Lectures and Presentations:**
All class PowerPoint presentations, and other applicable information will be posted on eCourses. It is recommended that you download the presentations for the class. Check this site regularly.

**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. Communications will also be sent as needed via eCourses site. Check your email regularly.

**Important dates**
- Jan 14: First day of Class
- Feb 4: Exam 1
- Feb 27: Topic for presentation due
- Mar 5: Mid Term Exam
- Mar 9-15: Spring Break
- Mar 27: Final Day to withdraw from Course(s) with Academic Record ("W")
- April 7: Exam 3
- April 21: Presentations
- April 30th: Final Exam