Florida A&M University College of Science and Technology Department of Biological Sciences

Fall 2022 BSC 2093 sec 004 (Anatomy & Physiology I Lecture) Catalog #:1562 Credit Hr. 3

LECTURE LOCATION: New Pharmacy Bld. Room 102

Course Mode of Delivery: This course is a face to face course with accessible on-line content via Canvas which includes Labster simulations, Tests, and Quizzes (both face to face and online).

1 – Professor: Dr. Adrian T. McCollum (adrian.mccollum@famu.edu) Class days and time: T/TH 9:30 – 10:45 am
Office Zoom Link: 9997476248 (Office Location 511 Jones Hall) Telephone: (850) – 412-5059
Office Hours: T, Th & F (11:00 am – 12:00 pm) (Please contact me first before visiting)


*Bring your text book and class PowerPoint slides to every class: it will be an essential reference.

3 – Course Description: This lecture course is intended to be the first course in a two-semester sequence designed for students majoring in the Allied Health Sciences, Nursing, Physical Education and the selected Natural Science Programs. It includes a study of the structure and function of the Integumentary, Skeletal, Muscular and Nervous systems with introductory lectures on the chemistry of the cell, tissues and membranes, tissue fluid and movement of substances across the cell membrane.

4 – Expected Learning Outcomes: A student who successfully completes this course will be able to:

- Define or describe the general terms, structures and concepts associated with each of the major topics discussed.
  - This outcome will be assessed by examinations and quizzes in the lecture.
- Demonstrate written communication skills.
  - This outcome will be assessed by examinations and quizzes in the lecture.
- Be able to analyze and interpret data, and critically interpret scientific information.
  - This outcome will be assessed by examinations and quizzes in lecture. Case studies, data interpretation will also be included.

5-BSC 2093 - LECTURE SCHEDULE (subject to change if necessary or expedient):

<table>
<thead>
<tr>
<th>Date</th>
<th>LECTURE TOPIC</th>
<th>CHAPTER</th>
</tr>
</thead>
<tbody>
<tr>
<td>8/23, 8/25</td>
<td>The Human Body Orientation</td>
<td>Chapter 1</td>
</tr>
<tr>
<td>8/30, 9/01</td>
<td>Basic Chemistry/ Biochemistry</td>
<td>Chapter 2</td>
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<tr>
<td>9/06, 9/08</td>
<td>Cells: The Living Units and Tissue: The Living Fabrics</td>
<td>Chapters 3 and 4</td>
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<tr>
<td>9/15</td>
<td>Test One</td>
<td>Test 1</td>
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<tr>
<td>9/13, 9/20</td>
<td>The Integumentary System</td>
<td>Chapter 5</td>
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<tr>
<td>9/22, 9/27</td>
<td>Bones &amp; Skeletal Tissue</td>
<td>Chapter 6</td>
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<td>10/04, 10/06</td>
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<tr>
<td>10/06, 10/11, 10/13</td>
<td>The Skeleton</td>
<td>Chapter 7</td>
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<tr>
<td>10/20</td>
<td>Test Two</td>
<td>Test 2</td>
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<tr>
<td>10/18, 10/25</td>
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<tr>
<td>10/27, 11/1, 11/3</td>
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<td>Chapter 8</td>
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<td>11/03, 11/8, 11/10</td>
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<td>Chapter 9</td>
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<tr>
<td>11/15</td>
<td>Test Three</td>
<td>Test 3</td>
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<tr>
<td>11/17</td>
<td>Fundamentals of the Nervous System &amp; Nervous Tissue</td>
<td>Chapter 10</td>
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<td>11/22, 11/29</td>
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<td>Chapter 11</td>
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<tr>
<td>11/29, 12/1</td>
<td>The Central Nervous Tissue (Spinal Cord)</td>
<td>Chapter 12</td>
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<tr>
<td>Finals Week</td>
<td><strong>Test Four (Final Exam) 50% Cumulative</strong></td>
<td>Final Test</td>
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**Monday’s class on 9-5-2022 (Labor Day). Thursday’s class on 11-11-2022 (Veteran’s Day). Thursday and Friday’s class 11-23 and 25 (Thanksgiving Break)

***Dates listed above are tentative and can change as the semester progresses***
6 – BSC 2093 Lecture Objectives

Test One

The Human Body Orientation
1. Know list of selected anatomical terminology.
2. Describe the levels of structural organization that compose the human body.
3. Describe several planes that may be passed through the human body and explain how sections are made.
4. Know how to label body cavities and name their contents.
5. Know how to label body regions and quadrants.

Basic Chemistry/ Biochemistry
6. Understand Basic Chemistry and chemical Reactions
7. Understand Exergonic and Endogonic
8. Understand Organic and Biochemistry and how that relates to cellular structures and human physiology

Cells: The Living Units and Tissue: The Living Fabrics
9. List the parts of a generalized cell.
10. List the functions of each part of the cell.
11. List the types of tissues.
12. Describe the general features of epithelial tissue.
13. Explain how covering and lining epithelium is classified.
14. Explain how connective tissue is classified.
15. Describe how muscle tissue is classified.
16. Describe how nervous tissue is classified.

Test Two

The Integumentary System
17. Know the structure of the integument
18. Know different disorders of the integument

Bones & Skeletal Tissue
19. Describe the microscopic structure of compact and spongy bone.
20. Know the difference between axial and appendicular skeleton.

The Skeleton
21. Know the bones (and selected markings) of the axial skeleton.
22. Know the bones (and selected markings) of the appendicular skeleton.
23. Know the different disorders that affect the bone

Test Three

Joints
24. Define an articulation (joint) and describe how the structure of an articulation determines its function.
25. Describe the structure of a typical synarthrosis and give examples.
26. Describe the structure of a typical amphiarthrosis and give examples.
27. Describe the structure of a typical diarthrosis.
28. Describe the types of diarthroses and the movements that occur at each.
29. Describe several special movements that occur at diarthroses.
30. Know the different disorders which can afflict joints

Muscles and Muscle Tissue
31. Describe the structure and function of smooth muscle tissue.
32. Describe the structure and function of cardiac muscle tissue.
33. Know the different disorders which can affect the muscular system

The Muscular System
34. Describe the connective tissue components, blood and nerve supply, and histology of skeletal muscle tissue.
35. Name and give the origin, insertion, and action of selected muscles.

Test Four

Fundamentals of the Nervous System & Nervous Tissue
36. Describe the organization of the nervous system.

The Central Nervous Tissue (Brain)
37. Describe how the brain is protected and supplied with blood.
38. Name the principal parts of the brain and explain the function of each part.
39. Describe how the spinal cord is protected.
40. Describe the structure and function of the spinal cord.

**The Central Nervous Tissue (Spinal Cord)**

41. Describe spinal nerves.

42. Explain selected reflex arcs.

43. Know the different disorders which can afflict the nervous system.

7-Grades: Your overall grade will be determined by following activities. There are no make up exams in this course without an excused absence signed by the Dean. You should speak with your instructor before the test or the week of the test if you need to miss or have missed a scheduled test. There are no make up quizzes at all regardless of the excuse.

<table>
<thead>
<tr>
<th>POINTS</th>
<th>Score</th>
<th>Letter Grade</th>
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<tbody>
<tr>
<td>Quiz Average</td>
<td>100</td>
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<tr>
<td>Labster Simulations</td>
<td>60</td>
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<tr>
<td>Exam 1</td>
<td>100</td>
<td>A: &gt;90% (414 - 460)</td>
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<tr>
<td>Exam 2</td>
<td>100</td>
<td>B: &gt;80% (368 - 413)</td>
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<tr>
<td>Exam 3</td>
<td>100</td>
<td>C: &gt;70% (322 - 367)</td>
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<tr>
<td>Final Exam</td>
<td>100</td>
<td>D: &gt;60% (276 - 321)</td>
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<td><strong>Total Possible Points =</strong> 460 (=100%) (&quot;Lowest Grade Dropped&quot;)</td>
<td><strong>F: &lt;59% (&lt; 276)</strong></td>
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* All exams should be taken and the lowest Grade will be dropped (this includes your Quiz Average)

8 – FAMU Academic Learning Compact: This course provides a component of the FAMU FAMOUS ALC based on the link [https://www.famu.edu/administration/strategic-planning-analysis-and-institutional-effectiveness/university-assessment/pdf/ALCpoliciesandproceduresRevisedSpring2007.pdf](https://www.famu.edu/administration/strategic-planning-analysis-and-institutional-effectiveness/university-assessment/pdf/ALCpoliciesandproceduresRevisedSpring2007.pdf). This course uses exams, quizzes, and Labster simulations to assess student learning outcomes associated with ALC (i) content/discipline knowledge and skills and (iii) critical thinking skills.

A WRITTEN COMPREHENSIVE MAKEUP EXAM will be given to students who miss an exam because of an emergency. The student must present a valid excuse bearing the original signature of the Dean of his/her school or division. In addition, original documentation of why you were absent should also be presented i.e. a funeral program or signed doctor’s slip with all contact information. No duplicate copies will be accepted. Excuses bearing two different typefaces and/or incorrect dates may be rejected. The date for the makeup exam will need to be scheduled for the week of finals. Students should make every effort to not miss the scheduled makeup. If you miss two exams, the make-up will count twice. More than two exams missed will lead to an automatic “F”. If a student arrives in class after a quiz has begun, he/she will only be allowed the remaining time to start and finish the quiz. **** NO MAKEUPS FOR LAB QUIZZES**** Makeup exams and change in grade will not be given after a semester grade has been submitted other than in cases where an “I” has been reported.

9 – Attendance: All labs are mandatory. You must arrive in lab on time, remain the entire lab periods, and not be disruptive.

10 – Late/Make-up work: Student Labster Simulations and On-line quizzes, once open for students to participate in, will be open until the last day of finals week, Friday 12-9-2022, at 6:00 pm.

**Withdrawals and Retroactive Withdrawal**
The last day to withdraw from a course or the university is November 4th, 2022. Instructors will not sign retroactive withdrawal forms for students who are failing and have no excuse or reason for failing the class.

11 – Professionalism-- Students are expected to act in a professional manner in dealing with all matters pertaining to this course. We will not tolerate cheating, so please plan on receiving a zero for any assignment / exam in which you choose not to act in a professional manner, in addition a grade of "F" in the course will be assigned, and a report to the Office of the Dean will be submitted. Whenever another person’s written work is utilized, whether it is a single phrase or longer, quotation marks must be used and sources cited. Paraphrasing another’s work, i.e., borrowing the ideas or concepts and putting them into one’s "own" words, must also be acknowledged.

12 – Other Class Policies:
- Cell phones should be turned off when you are in class.
- Eating, drinking, and chewing gum is expressly forbidden and is NOT allowed in class.
- Be prepared to work when you arrive to the class. Familiarize yourself with the lecture material before coming to class. It would be to your best interest to read ahead before class.
- Carefully follow directions during exams. If you are in doubt about any question or part of your exam, ask your teacher for help.

13 – Special Needs - If you have special needs as addressed by the Americans with Disabilities Act (ADA) and need assistance please do not hesitate to contact me. Additionally, if you have special needs regarding exams, you may contact the Learning Development and Evaluation Center, (850) 599-3180, for assistance.

14 – Department of Biological Sciences Procedure for Resolving Student-Faculty Conflicts - The Department of Biological Sciences has the following procedure in place with aim to resolve student-faculty conflicts. Application of these procedures is part of the department’s commitment to be in line with University's Moto of "Excellence with Caring".

- It is suggested that the student who has a specific conflict first discuss his/her concern with the instructor in question during office hours.
- In an event where the student cannot resolve the concern with the instructor, the student should submit a detailed written statement of the problem to the department Chairperson.
- The Chairperson will discuss the student's complaint with the instructor.
- The instructor shall provide a written response to the Chairperson.
- If deemed necessary, the Chairperson will arrange a meeting with both the instructor and student.
- If either party feels the conflict is still unresolved, the Chairperson will forward response/recommendation to the Dean's office.

15 – Policy Statement on Non-Discrimination

It is the policy of Florida Agricultural and Mechanical University to assure that each member of the University community be permitted to work or attend classes in an environment free from any form of discrimination including race, religion, color, age, disability, sex, marital status, national origin, veteran status and sexual harassment as prohibited by state and federal statutes. This shall include applicants for admission to the University and employment.

16 – Academic Honor Policy Statement

Florida A&M University is committed to academic honesty and its core values, which include scholarship, excellence, accountability, integrity, fairness, respect, and ethics. These core values are integrated into this academic honesty policy. Being unaware of the Academic Honesty Policy is not a defense for violations of academic honesty. Additional detail on FAMU Academic Honesty Violations are provided in the University Policy 2.012 (10.)(s). If you have any questions, please see your Academic Advisor.

17 – University Americans with Disabilities Act (ADA) Statement

The Florida A&M University Americans with Disabilities Act (ADA) Policy Statement states that “Individuals who need a reasonable accommodation must notify the Office of Equal Opportunity Programs at 599-3076.” It is the responsibility of the FAMU Equal Opportunity Programs (EOP) Office, through the ADA Coordinator, to ensure the Florida A&M University is in compliance with the Americans with Disabilities Act. If you have any questions, please contact your Academic Advisor or the University EOP Officer, Equal Opportunity Programs, 674 Gamble Street, Tallahassee, FL 32307, (850) 599-3076.