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

Fall /2023    BSC 2085 sec 004 (Anatomy & Physiology I Lecture)    Catalog #:1516    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: M (9:30 am – 12:30 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>8/29, 8/31</td>
<td>The Human Body Orientation</td>
<td>Chapter 1</td>
</tr>
<tr>
<td>9/5, 9/7, 9/12</td>
<td>Basic Chemistry/ Biochemistry</td>
<td>Chapter 2</td>
</tr>
<tr>
<td>9/12, 9/14, 9/19</td>
<td>Cells: The Living Units and Tissue: The Living Fabrics</td>
<td>Chapters 3 and 4</td>
</tr>
<tr>
<td>9/26</td>
<td>9/21, 9/28, 10/3, 10/5, 10/10</td>
<td>Test One</td>
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<tr>
<td></td>
<td>The Integumentary System</td>
<td>Test 1</td>
</tr>
<tr>
<td>10/12, 10/17</td>
<td>Bones &amp; Skeletal Tissue</td>
<td>Chapter 5</td>
</tr>
<tr>
<td>10/17, 10/19, 10/24</td>
<td>The Skeleton</td>
<td>Chapter 6</td>
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<tr>
<td>10/31</td>
<td>10/26, 11/02</td>
<td>Test Two</td>
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<tr>
<td></td>
<td>Joints</td>
<td>Test 2</td>
</tr>
<tr>
<td>11/07, 11/09, 11/14</td>
<td>Muscles and Muscle Tissue</td>
<td>Chapter 9</td>
</tr>
<tr>
<td>11/14, 11/16, 11/21</td>
<td>The Muscular System</td>
<td>Chapter 10</td>
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<tr>
<td>11/28</td>
<td>11/30</td>
<td>Test Three</td>
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<tr>
<td></td>
<td>Fundamentals of the Nervous System &amp; Nervous Tissue</td>
<td>Test 3</td>
</tr>
<tr>
<td>12/5, 12/07</td>
<td>The Central Nervous Tissue (Brain)</td>
<td>Chapter 11</td>
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<tr>
<td>12/7</td>
<td>The Central Nervous Tissue (Spinal Cord)</td>
<td>Chapter 12</td>
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<tr>
<td><strong>Finals Week (12/13 7:30 am)</strong></td>
<td><strong>Test Four (Final Exam) 50% Cumulative</strong></td>
<td><strong>Final Test</strong></td>
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</tbody>
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** There is no class on Monday’s class on 9-4-2023 (Labor Day), Friday’s class on 11-10-2023 (Veteran's Day), and Wednesday, Thursday, and Friday's classes from 11-22 to 11-24 (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 afflict 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>
<tr>
<td>Labster Simulations</td>
<td>60</td>
<td>A: &gt;90% (414 - 460)</td>
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<tr>
<td>Exam 1</td>
<td>100</td>
<td>B: &gt;80% (368 - 413)</td>
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<tr>
<td>Exam 2</td>
<td>100</td>
<td>C: &gt;70% (322 - 367)</td>
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<tr>
<td>Exam 3</td>
<td>100</td>
<td>D: &gt;60% (276 - 321)</td>
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<tr>
<td>Final Exam</td>
<td>100</td>
<td></td>
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<tr>
<td>Total Possible Points = 460 (100%)</td>
<td>(*Lowest Grade Dropped)</td>
<td>F: &lt;59% (&lt; 276)</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 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 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 12-15-2023, at 6:00 pm.

Withdrawals and Retroactive Withdrawal

The last day to with draw from a course or the university is November 9th, 2023. 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 Lecture Policies:
-Cell phones should be turned off or on silent when you are in class.
-Eating, drinking, and chewing gum is frowned upon and tends to be NOT allowed in most classroom settings.
13 – Special Needs - if you have special needs as addressed by the Americans with Disabilities Act (ADA) and need assistance 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 Policy on COVID-19 and mask wearing

“Wearing a face covering inside public buildings can help prevent the spread of COVID-19 and any of its variants in the community. In accordance with guidance from the Centers for Disease Control and Prevention (CDC) and the Florida Department of Health, Florida A&M University encourages everyone to wear a face covering in university buildings, including classrooms, regardless of vaccination status. Face coverings should be worn appropriately (i.e., covering both your mouth and nose) in the building if you are attending class in person. Everyone is encouraged to wear one while inside any university building or public space in which social/physical distancing cannot be observed. Face coverings other than those provided by the University are acceptable so long as they provide appropriate coverage (mouth and nose). Face coverings protect the health and safety of individual students as well as the health and safety of their classmates, instructor, and the university community. Anyone attending class in person without a face covering or whose face covering does not provide appropriate coverage may obtain a face covering, free of charge from University locations throughout the University. Instructors can decide how to handle their class if anyone present creates a disruption in class regarding behavioral expectations. They should be able to set clear standards of behavior and address classroom disruptions, if they arise. If necessary, students can be requested to leave class. If student fails to leave class, assess the situation and dismiss class. If continuing disruption occurs, pursue administrative response (Student Conduct, Administrative Withdrawal, etc.) Students should observe signage or otherwise sit, stand, and situate themselves in the seating arrangement identified by their instructor. Disruptive students may face disciplinary action for Student Code of Conduct violations. Students may consult with the Center for Disability Access and Resources (CeDAR) for accommodations, as necessary. Finally, students who are experiencing COVID-19 related symptoms may be requested not attend class in person and will be encouraged to contact a health care provider. Students must report
their absence to the course instructor. Alternatively, students may contact Student Health Services to report their absence, who will work with the student to communicate with the course instructor.”

18 – University Americans with Disabilities Act (ADA) Statement
The Florida A&M University Americans with Disabilities Act (ADA) Policy Statement sates 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.

19 – University Compliance with House Bill 7 (HB7)
Fundamental to the institution’s mission is support for an environment where divergent ideas, theories, and philosophies can be openly exchanged and critically evaluated. Consistent with these principles, this course may involve discussion of ideas that you find uncomfortable, disagreeable, or even offensive. These ideas are intended to be presented in an objective manner and not as an endorsement of what you should personally believe. Objective means that the idea presented can be tested by critical peer review and rigorous debate, and that the idea is supported by credible research. Not all ideas can be supported by objective methods or criteria. Regardless, you may decide that certain ideas are worthy of your personal belief. In this course, however, you may be asked to engage with complex ideas and to demonstrate an understanding of the ideas. Understanding an idea does not mean that you are required to believe it or agree with it. FAMU takes its obligations to HB7 very serious and faculty, staff, and/or students who feel that there is an issue of HB7 violation should first follow the chain of command by confronting the professor/instructor or employee first then the chair/director or employer to have this resolved. However, if the conflict cannot be resolved or addressed by these means then it is suggested that the student take this issue to the Office of Compliance and Ethics via the Compliance and Ethics Hotline (Link: https://www.famu.edu/administration/compliance-and-ethics/index.php) or phone number (866)-445-4968.

20 – FAMU and Mental Health
Florida A&M University takes the mental health of their students seriously. College students face issues of depression, anxiety, high levels of stress, trauma, grief, strained relationships, and mental health challenges which have increased over time and in part as a result of the past Covid issues. There are active resources on campus to assist students with issues associated with mental stress or strain as well as mental health. If you feel you or a classmate may be dealing with issues, like those mentioned above, then it is important that you discuss this with the appropriate authorities including your instructor/professor, your department chair, your advisor, or your campus mental health professional located in the Office of Counseling Services. The link for the Office of Counseling Services is https://www.famu.edu/students/student-resources/health-and-wellbeing/counseling-services/index.php and the phone number is (850)-599-3145.