ANATOMY AND PHYSIOLOGY I
Biology 2401.002
Department of Life Science
Spring 2016

A. COURSE INFORMATION

Course number/section: Biology 2401.002
Class meeting time: TR 2:00 pm – 3:15 pm
Class location: CS-101
Course Website: https://bb9.tamucc.edu

B. INSTRUCTOR INFORMATION

Instructor: Dr. Fatemeh Anvari Nekovei
Office location: TBA
Office hours: TBA
e-mail: Fatemeh.Nekovei@tamucc.edu
Appointments: email Dr. Nekovei

C. COURSE DESCRIPTION

Catalog Course Description
Structure and function of the human body emphasizing biological chemistry, cell biology, tissues, and the integumentary, skeletal, muscular, and nervous systems. Not recommended for majors in the College of Science and Engineering. To count this course toward a major in the Department of Life Sciences, a student must demonstrate that it is required by professional schools in his or her career track and obtain approval for a substitution from his or her faculty mentor. Students may not receive credit for both this course and either BIOL 3425 or BIOL 3430. SMTE 0091 is a co-requisite for this course. Documented completion of this safety training is required early in the semester for continued participation in this course. Not recommended for Biology or Biomedical Sciences majors. Safety training given during a laboratory meeting early in the semester is required for continued participation in this course.

D. PREREQUISITES AND COREQUISITES

Prerequisites
None

Corequisites
Biological Laboratory Safety Seminar: SMTE 0091

E. REQUIRED TEXTBOOK(S), READINGS AND SUPPLIES

Required Textbook(s)
Required Laboratory Manual
Amerman. Exploring Anatomy & Physiology in the Laboratory; Core concepts. Morton Publishing Company. You will not receive credit for the laboratory without an unused (new) laboratory manual. Laboratory manuals can’t be shared between students. Each student must have his/her own laboratory manual.

Optional Textbook(s) or Other References
Any of the various anatomy and/or physiology coloring books that are available in bookstores, such as: Kapit, W. and Elson, L.M. (2002). The Anatomy Coloring Book. 3rd ed. Benjamin Cummings, San Francisco, CA. Any of the various atlases of anatomy and/or physiology that are available in bookstores, such as: Van De Graaff, K.M. and Crawley, J.L. (2003). A Photographic Atlas for the Anatomy and Physiology Laboratory, 5th ed. Morton Publishing Company.

Supplies
A laboratory coat is required. You can’t enter the laboratory without a proper laboratory coat and thus will not receive credit for the laboratory. Proper laboratory attire must be worn at all times, including during laboratory exams. If you do not have the proper attire, you can’t attend the laboratory or take the exam/quiz.

F. STUDENT LEARNING OUTCOMES AND ASSESSMENT
Assessment is a process used by instructors to help improve learning. Assessment is essential for effective learning because it provides feedback to both students and instructors. A critical step in this process is making clear the course’s student learning outcomes that describe what students are expected to learn to be successful in the course. The student learning outcomes for this course are listed below. By collecting data and sharing it with students on how well they are accomplishing these learning outcomes students can more efficiently and effectively focus their learning efforts. This information can also help instructors identify challenging areas for students and adjust their teaching approach to facilitate learning.

This course seeks to give students an understanding of the human organism by examining its components and their interactions. Broadly, students will study the structure and function of the human body emphasizing on biological chemistry, cell biology, tissues level and organ systems. The lectures we will cover topics that range from transport across membranes, passive membrane properties, as well as neuron structure and function and muscle structure and functions. Although the main emphasis of this course is an understanding of the structure and function of the normal human body, we will also discuss how abnormal conditions serve as natural experiments that help to elucidate normal structure and function. To do well in the course, students must attend and participate in lectures and laboratories, read the assigned material and mentally organize information from their instructors, their readings and their
laboratory work. For all components that are examined within each topic in the schedule, the student will be expected to:

- Understand and correctly use scientific and clinical terminology.
- Recognize and identify structures in the human body including their components.
- Understand and explain how structures and their components interact to perform one or more functions.
- Discuss homeostatic control mechanisms that regulate a particular structure/function, and what in turn that particular structure/function regulates.
- Explain the structural and/or functional bases of selected clinical conditions, dysfunctions and disease states that help to explain the normal structure and function of the body by perturbing it.

G. INSTRUCTIONAL METHODS AND ACTIVITIES

The instructor of this course will provide the students with: 1- information in the form of Power Point lecture notes posted on Blackboard, in-class lectures, handouts, in-class exercises, assigned readings, hands-on exercises; 2- specimens and models for hands-on examination in the laboratory; 3- advise, supervision and guidance. The laboratories are designed to augment and promote the overall learning process.

H. MAJOR COURSE REQUIREMENTS AND GRADING

Your final letter grade will be based on the points you earn in lecture and laboratory. The final grading scale will also be determined at the end of the semester, but the cut-off for each grade will be no higher than the following:

$$\text{A} \geq 90\% > \text{B} \geq 80\% > \text{C} \geq 70\% > \text{D} \geq 60\% > \text{F}$$

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>% of FINAL GRADE</th>
</tr>
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<tbody>
<tr>
<td>Exams</td>
<td>75%</td>
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<tr>
<td>Laboratory</td>
<td>25%</td>
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LECTURE EXAMINATIONS: I will give three examinations and one final during the course. I will be taking questions for these tests primarily from material covered in the lectures. Examinations will be multiple-choice and short answer questions. The three lecture examinations are sequential (i.e., each examination covers material from one specific section of the course).

The final examination is comprehensive (i.e., covers material from the entire course). The final is redemptive. In other words, if you earn a higher score on the final than on one of your lecture exams, it will be doubled to replace your lowest examination grade: The
average of the two highest non-final examinations plus double (2x) the final examination.

Because of this flexibility, however, no make-up examinations are allowed, except in extreme emergency situations of official University business.

LABORATORY POINTS: In the laboratory, you will receive total points. Your % will be calculated from these points. Specific laboratory grading, policies, and rules will be discussed separately and again thoroughly in laboratory.

I. COURSE CONTENT/SCHEDULE

<table>
<thead>
<tr>
<th>WEEK</th>
<th>Topic, Chapter(s)</th>
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<tbody>
<tr>
<td>1 (January 21)</td>
<td>Introduction</td>
</tr>
<tr>
<td>2 (January 26, 28)</td>
<td>Levels of organization: Chapters 1, 2</td>
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<tr>
<td>3 (February 2, 4)</td>
<td>The cell and tissues: Chapters 3, 4</td>
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<tr>
<td>4 (February 9, 11)</td>
<td>Tissues and integument: Chapters 4, 5</td>
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<tr>
<td>5 (February 16, 18)</td>
<td>review for Test 1; Test 1: February 18</td>
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<tr>
<td>6 (February 23, 25)</td>
<td>Bone tissue and Joints: Chapter 6, 9</td>
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<tr>
<td>7 (March 1, 3)</td>
<td>Muscular Tissue and muscle physiology: Chapter 10</td>
</tr>
<tr>
<td>8 (March 8, 10)</td>
<td>Muscular Tissue and Muscular System: Chapters 10, 11</td>
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<tr>
<td>9 (March 14-20)</td>
<td>Spring Break</td>
</tr>
<tr>
<td>10 (March 22, 24)</td>
<td>Nervous tissue: Chapter 12; review for Test 2</td>
</tr>
<tr>
<td>11 (March 29; 31)</td>
<td>Test 2: March 29; Nervous Tissue: Chapter 12</td>
</tr>
<tr>
<td>12 (April 5, 7)</td>
<td>Integration of Nervous system: Chapters 15, 16</td>
</tr>
<tr>
<td>13 (April 12, 14)</td>
<td>Integration of Nervous system: Chapters 15, 16</td>
</tr>
<tr>
<td>14 (April 19, 21)</td>
<td>Special senses: Chapter 17</td>
</tr>
<tr>
<td>15 (April 26, 28)</td>
<td>review for Test 3; Test 3: April 28</td>
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<tr>
<td>16 (May 3)</td>
<td>review for final; Last day of class</td>
</tr>
<tr>
<td>May 10: 1:45 PM to 4:15 PM</td>
<td>Final exam (Comprehensive)</td>
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</table>

Note: Changes in this course schedule may be necessary and will be announced to the class by the Instructor. The assignments and exams shown are directly related to the Student Learning Outcomes described in Section F.
J. COURSE POLICIES

Attendance/Tardiness
Attendance is the student’s responsibility and students are expected to attend every class and laboratory.

Late Work and Make-up Exams
Practical Examinations require extensive set-up, and neither time nor space is available for make-up practical examinations. Missing laboratories will result in loss of points.

Extra Credit
No individual extra credit assignments will be available in this class.

Cell Phone Use
Cell phones must be turned off during class and laboratory.

Laptop Use
You may use your laptop to take notes. Any disruptive behavior on your computer (Facebook, games, etc.) will result in loss of points.

Food in Class
No food is allowed; you may bring water but make sure you keep the classroom clean. During exams absolutely no food or drink is allowed.

K. COLLEGE AND UNIVERSITY POLICIES

• Academic Integrity (University)
University students are expected to conduct themselves in accordance with the highest standards of academic honesty. Academic misconduct for which a student is subject to penalty includes all forms of cheating, such as illicit possession of examinations or examination materials, falsification, forgery, complicity or plagiarism. (Plagiarism is the presentation of the work of another as one’s own work.) In this class, academic misconduct or complicity in an act of academic misconduct on an assignment or test will result in a failing grade.

• Classroom/Professional Behavior
Texas A&M University-Corpus Christi, as an academic community, requires that each individual respect the needs of others to study and learn in a peaceful atmosphere. Under Article III of the Student Code of Conduct, classroom behavior that interferes with either (a) the instructor’s ability to conduct the class or (b) the ability of other students to profit from the instructional program may be considered a breach of the peace and is subject to disciplinary sanction outlined in article VII of the Student Code of Conduct. Students engaging in unacceptable behavior may be instructed to leave the classroom. This prohibition applies to all instructional forums, including classrooms, electronic classrooms, labs, discussion groups, field trips, etc.
• **Statement of Civility**
Texas A&M University-Corpus Christi has a diverse student population that represents the population of the state. Our goal is to provide you with a high quality educational experience that is free from repression. You are responsible for following the rules of the University, city, state and federal government. We expect that you will behave in a manner that is dignified, respectful and courteous to all people, regardless of sex, ethnic/racial origin, religious background, sexual orientation or disability. Behaviors that infringe on the rights of another individual will not be tolerated.

• **Deadline for Dropping a Course with a Grade of W (University)**
The grade of W will be assigned to any student officially dropping a course. Please consult with the instructor before you decide to drop to be sure it is the best thing to do. Just stopping attendance and participation WILL NOT automatically result in your being dropped from the class. Should dropping the course be the best course of action, visit the Office of the University Registrar for the Course Drop Form that must be submitted. No student is eligible to receive a W without completing the official drop process by this deadline. Please consult the Academic Calendar (http://www.tamucc.edu/academics/calendar/) for the last day to drop a course.

• **Grade Appeals (College of Science and Engineering)**
    As stated in University Procedure 13.02.99.C2.01, Student Grade Appeal Procedures, a student who believes that he or she has not been held to appropriate academic standards as outlined in the class syllabus, equitable evaluation procedures, or appropriate grading, may appeal the final grade given in the course. The burden of proof is upon the student to demonstrate the appropriateness of the appeal. A student with a complaint about a grade is encouraged to first discuss the matter with the instructor. For complete details, including the responsibilities of the parties involved in the process and the number of days allowed for completing the steps in the process, see University Procedure 13.02.99.C2.01, Student Grade Appeal Procedures. These documents are accessible through the University Rules website at http://www.tamucc.edu/provost/university_rules/index.html, and the College of Science and Engineering Grade Appeals webpage at http://sci.tamucc.edu/students/GradeAppeal.html. For assistance and/or guidance in the grade appeal process, students may contact the chair or director of the appropriate department or school, the Office of the College of Science and Engineering Dean, or the Office of the Provost.

• **Disability Services**
The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please call (361) 825-5816 or visit Disability Services in Corpus Christi Hall 116.
If you are a returning veteran and are experiencing cognitive and/or physical access issues in the classroom or on campus, please contact the Disability Services office for assistance at (361) 825-5816.

http://disabilityservices.tamucc.edu/

- **Statement of Academic Continuity**
  In the event of an unforeseen adverse event, such as a major hurricane and classes could not be held on the campus of Texas A&M University–Corpus Christi; this course would continue through the use of Blackboard and/or email. In addition, the syllabus and class activities may be modified to allow continuation of the course. Ideally, University facilities (i.e., emails, web sites, and Blackboard) will be operational within two days of the closing of the physical campus. However, students need to make certain that the course instructor has a primary and a secondary means of contacting each student.

L. **OTHER INFORMATION**

- **Academic Advising**
  The College of Science & Engineering requires that students meet with an Academic Advisor as soon as they are ready to declare a major. The Academic Advisor will set up a degree plan, which must be signed by the student, a faculty mentor, and the department chair. Meetings are by appointment only; advisors do not take walk-ins. Please call or stop by the Advising Center to check availability and schedule an appointment. The College’s Academic Advising Center is located in Center for Instruction 350 or can be reached at (361) 825-3928.

**GENERAL DISCLAIMER**
I reserve the right to modify the information, schedule, assignments, deadlines, and course policies in this syllabus if and when necessary. I will announce such changes in a timely manner during regularly scheduled lecture periods.