Semester and Year: Spring 2019  
Section: 83501  
Class time and days: Lecture: M 5:40-8:25  
Lab: W 5:40-8:25  
Room: Lecture: WH160  
Lab: SH131  
Instructor: Dongping Zhang  
Contact Info: dzhang@dcccd.edu, 214-559-8375  
Office:  
Office hours:  
Final Exam Day/time: Mon., May 13@ 5:40pm  
   
Evaluation Procedures:  
   Lecture exams (3 @ 100pts) 300  
   ( Final 100 + 50 cumulative) 150  
   Online mastering A&P homework 100  
   Lab practical tests (3 @ 70pts.) 210  
   pop quiz (and other assignments) 50  
   Pre- lab quizzes 90  
   900  
   810-900 = A,  
   720-809 = B,  
   630-719 = C,  
   540-629 = D,  
   less than 540 = F  
   [This may change at the discretion of the instructor.]  
   
Lecture and Lab Examinations:  
   • NO MAKE-UPS!! There are absolutely no make-ups for any missed lecture/lab tests. No late  
     assignments are accepted for this course. The lecture examinations will be a combination of multiple  
     choice, true or false, matching and short answer questions.  
     • Quizzes (pop-quiz): NO MAKE-UPS FOR QUIZZES! Pop quiz usually occurs at the beginning  
       of the class  
   
Attendance Policy: In order to be successful, students must attend and participate in enrolled  
   courses. Attendance is necessary for class participation and course work. There will be no  
   make-up opportunities for missed assignments. Thus, it is strongly recommended that students  
   attend each class. However, there will be no official course grading policy on attendance. If  
   there is a conflict in your schedule, contact me ASAP. .
Required Materials:

The Mastering A&P online homework is REQUIRED: http://masteringaandp.com

1. Textbook: FUNDAMENTALS OF ANATOMY & PHYSIOLOGY (11th ed.)—4 choices

- Mastering A&P with eText - ISBN 013447869X or 9780134478692
- Mastering A&P + 3 hole punch unbound print - ISBN 0134478754 or 9780134478753
- Mastering A&P + clothbound text - ISBN 013439495X or 9780134394954
- IF YOU ALREADY HAVE A TEXTBOOK, and just need the MAP access---can buy directly from masteringaandp.com (which then changes to https://www.pearsonmylabandmastering.com/northamerica/masteringaandp/, oddly enough).


Be sure to bookmark this website—http://delrio.dcccd.edu/jreynolds/A&P/index.html. It has links to lab practical reviews, graphics that go along with the lab manual, and links for microbiology courses, also.

Instructor Policies and Suggestions for Student Success:

- Students pursuing careers in the Health Professions can find specific information on occupations, resources, financial aid, and programs at Texas institutions at this RLC Health Professions website: www.rlc.dcccd.edu/medcareers
- This class DEMANDS group interactive skills, both in lab and lecture. Be aware that you will have to COOPERATE with lab partners, in addition to collaborative work groups in the lecture class. Be prepared to be an ACTIVE learner, and to work cooperatively with other students: IF YOU CANNOT OR WILL NOT DO THIS, YOU MIGHT WANT TO RE-THINK THIS CLASS.
- MINK DISSECTIONS ARE PERFORMED IN THE LAB, PER TABLE: BE AWARE OF THIS REQUIREMENT. IT IS YOUR RESPONSIBILITY TO HAVE GLOVES WHEN NEEDED IN LAB.
- You are expected to behave in an adult manner while in class. Inappropriate class behaviors include sleeping, working on other class assignments, talking incessantly, and cheating. If you behave in a nonadult, irresponsible manner, you will be asked to leave the classroom. Cheating on a lab quiz or lecture exam is absolutely forbidden and is grounds for giving you an F as a course grade.
- Please be considerate enough to turn your cell telephones to vibrate, AND leave the room as quietly as possible to talk (ONLY IF ABSOLUTELY NECESSARY to talk right then and right there!). During an exam or lab practical, all phones will be put up and turned off. No text messaging during classtime, please.
- FOOD AND DRINK IN THE CLASSROOM? You may bring in munchies and drinks IN, but you have to carry the trash from these items OUT! I will remind you about this if I see you leaving trash.
- Consider this class as or more important than your job. It is not O.K. to leave lab early, or miss lab completely, because of work.
- NO WHINING IS ALLOWED!!!

"Academic dishonesty" is understood as any act of deceit bearing on one's own or another's
academic work, where "academic work" is understood to mean any activity pertaining to the educational mission of the college.

Such acts include, but are not limited to, plagiarism in any form; the use during an exam of information or materials not authorized by the instructor for such use and any other activities which are designed to deceive an instructor in the evaluation of the level of the student's achievement.

plagiarism = deliberate use of someone else's language, ideas, or other original (not common-knowledge) material without acknowledging its source. This definition applies to texts published in print or on-line, to manuscripts, and to the work of other student writers. Plagiarism is the taking of someone's ideas and misrepresenting them as one's own ideas. Most people know that this obviously includes word-for-word lifting of words, but it also includes lifting ideas (even paraphrasing them in your own words) without giving someone credit for them (either by footnoting, or in the Works Cited at end of the paper). Plagiarism is NOT allowed.

Academic Misconduct Regarding Exams & Lab Practicals:

Cheating on tests and lab practicals include, but is not limited to, the following activities:
- looking onto someone’s answer sheet, even if you do not use their answers,
- knowingly allowing someone to look onto your answer sheet,
- using a cheat sheet, or other unauthorized material
- talking to someone or otherwise exchanging information during an exam,
- asking someone what is on a lab practical or telling someone what is on a lab practical,
- waiting out in the hallway when people have just taken the exam to hear them discuss the lab exam.
- removing from lab any material meant to stay in lab, e.g., models, dissected organs, etc.,
- writing answers on the table
- writing answers on the question card
- going or looking into a lab where the lab practical is set up, and,
- getting the answer key before the test.

Students should not leave during a lab practical to use the bathroom. Go BEFORE the exam. If you have a health problem which your instructor needs to know about, to enable you to leave class to go to the restroom, please inform him/her at the beginning of the semester.

Any student violating any rule(s) above will get a ZERO on the lab practical exam.

Richland College's Quality Enhancement Plan ~ Learning to Learn: Developing Learning Power
Richland College is piloting its Quality Enhancement Plan (QEP) in select classes. The QEP provides techniques, practices, and tools to help students develop the habits, traits or behaviors needed to be effective and successful lifelong learners in college and in life. For more information, please check QEP 2013 (http://www.richlandcollege.edu/QEP2013)
**Academic Progress:** Students are encouraged to discuss academic goals and degree completion with their instructors. Specific advising is available throughout the semester. Check www.richlandcollege.edu/admissions/process.php for more details.

**Institutional Policies:**
Institutional Policies relating to this course can be accessed from the following link www.richlandcollege.edu/syllabipolicies

**Catalog Course Description**

**Course Description:** This course examines cell structure and function, tissues, and the skeletal, muscular, and nervous systems. Emphasis is on structure, function, and the interrelationships of the human systems. This is a transferable course intended for those seeking to complete a Bachelor's Degree.

**Pre-requisites:** BIOL 1406 or SCIT 1407. One of the following must be met: (1) DREA 0093 AND DWR1 0093; (2) English as a Second Language (ESOL) 0044 AND 0054; or (3) have met Texas Success Initiative (TSI) in Reading and Writing standards AND the college Writing score prerequisite requirement.

**Course Objective**
Biology 2401 is recommended as required or an elective course for biology majors, pre-medical/pre-dental students, nursing students, and others who are in the allied health professions. The semester covers the structure and function of the human body in both a lab and lecture format. In addition to the extensive lab coverage of human anatomy and histology, mink dissections will be a major component of the course. Biol 2401 examines cell structure and function, tissues, and the skeletal, muscular, and nervous systems. Emphasis is on structure, function, and the interrelationships of the human systems, as well as regulation of physiological functions involved in maintaining homeostasis.

- Learn basic anatomical and physiological terminology. Use anatomical terminology to identify and describe locations of major organs of each system covered. Locate and identify anatomical structures.
- Learn the human structure at cellular, tissue, and system level (endocrine, circulatory, respiratory, digestive, urinary, reproductive systems for Biol 2402), and be able to identify major structures at human models and animal dissections.
- Understand how body systems are interrelated to maintain the homeostasis as a whole. Explain interrelationships among molecular, cellular, tissue, and organ functions in each system. Describe the interdependency and interactions of the systems.
- Learn the concepts and mechanisms of normal physiological processes in endocrine, circulatory, respiratory, digestive, urinary, reproductive systems, and explain how those processes are impaired under abnormal conditions.
- Explain contributions of organs and systems to the maintenance of homeostasis. Identify causes and effects of homeostatic imbalances.
- Perform relevant lab activities or tests to apply the learned physiological principles in professional cases. Describe modern technology and tools used to study anatomy and physiology.
- Discuss the relevance of specific anatomical structures or their related functions to clinical applications to better understand the relationship between structure and function.
- Apply appropriate safety and ethical standards.
• Appropriately utilize laboratory equipment, such as microscopes, dissection tools, general lab ware, physiology data acquisition systems, and virtual simulations.
• Work collaboratively to perform experiments.
• Demonstrate the steps involved in the scientific method. Communicate results of scientific investigations, analyze data and formulate conclusions.
• Use critical thinking and scientific problem-solving skills, including, but not limited to, inferring, integrating, synthesizing, and summarizing, to make decisions, recommendations and predictions.

Core Curriculum Statement

Intellectual Competencies:
1. **Reading**: the ability to analyze and interpret a variety of printed materials-books, documents, and articles- above the 12th grade level.
2. **Writing**: the ability to produce clear, correct and coherent prose adapted to purpose, occasion and audience above the 12th grade level.
3. **Speaking**: ability to communicate orally in clear, coherent, and persuasive language appropriate to purpose, occasion, and audience – above the 12th grade level.
4. **Listening**: analyze and interpret various forms of spoken communication, possess sufficient literacy skills of writing, reading- above the 12th grade level.
5. **Critical Thinking**: think and analyze at a critical level.
6. **Computer Literacy**: understand our technological society, use computer-based technology in communication, solving problems, and acquiring information

Schedule --- next page:
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<thead>
<tr>
<th>WEEK</th>
<th>LECTURE TOPIC</th>
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<th>LAB TOPIC</th>
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<tbody>
<tr>
<td>Jan 21</td>
<td>Introduction (to be squeezed into other class time) (Martin Luther King Holiday on Monday)</td>
<td>1</td>
<td>Safety &amp; Check-in The Language of Anatomy Organ Systems Overview</td>
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<tr>
<td>Jan 28</td>
<td>Introduction Cells: structures, division &amp; transport</td>
<td>1</td>
<td>The Microscope The Cell: Anatomy and Division</td>
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<td>Feb 04</td>
<td>Tissues</td>
<td>4</td>
<td>The Cell: Transport Mechanisms and Cell Permeability Classification of Tissues</td>
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<tr>
<td>Feb 11</td>
<td>Integumentary System LECTURE EXAM 1 (CHAPTER 1-4)</td>
<td>5</td>
<td>Classification of Tissues (continued) The Integumentary System</td>
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<td>Feb 18</td>
<td>Integumentary System Osseous Tissue &amp; Bone Structure</td>
<td>6</td>
<td>LAB PRACTICAL 1</td>
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<tr>
<td>Feb 25</td>
<td>Skeleton Articulations</td>
<td>7-8</td>
<td>Overview of the Skeleton The Axial Skeleton Anatomage- Skeletal System Identification</td>
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<td>Mar 04</td>
<td>Articulations Muscle Tissue LECTURE EXAM 2 (CHAPTER 5-9)</td>
<td>9</td>
<td>The Appendicular Skeleton Articulations and Body Movements Anatomage-</td>
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<td>Mar 11</td>
<td>No Class - Spring Break</td>
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<td>No Lab-Spring Break</td>
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<td>Mar 18</td>
<td>Muscle Tissue</td>
<td>10</td>
<td>Microscopic Anatomy &amp; Organization of Skeletal Muscle</td>
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<td>Apr 1</td>
<td>Neural Tissue</td>
<td>12</td>
<td>Gross Anatomy of the Muscular System (continued) Mink Muscle Dissection – bring gloves</td>
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<tr>
<td>Apr 8</td>
<td>Spinal Cord &amp; Spinal Nerves Brain &amp; Cranial Nerves</td>
<td>13</td>
<td>LAB PRACTICAL 2</td>
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<tr>
<td>Apr 15</td>
<td>Brain &amp; Cranial Nerves LECTURE EXAM 3 (CHAPTER 10-13)</td>
<td>14</td>
<td>Histology of Nervous Tissue Gross Anatomy of the Brain and Cranial Nerves</td>
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<td>April 12 – LAST DAY TO WITHDRAW</td>
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<td>The Spinal Cord and Spinal Nerves Brain Dissection - bring gloves</td>
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<td>Apr 22</td>
<td>Special Senses</td>
<td>17</td>
<td>Special Senses: Olfaction and Taste Human Reflex Physiology Special Senses: Hearing and Equilibrium Anatomage- Nerve Identification</td>
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<td>May 06</td>
<td>Autonomic Nervous System</td>
<td>16</td>
<td>LAB PRACTICAL 3</td>
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<tr>
<td>May 13</td>
<td>Final Exam (Chapter 14-17 + Cumulative)</td>
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