Anatomy & Physiology I
BIOL 2401-63001 & SCIT 1407-63001
Semester: Spring 2019
January 22, 2019 – May 16, 2019

Professor: Stacy Vasquez
Email: Svasquez@dcccd.edu
Office Phone Number: 214-860-8651
Office Location: H120
Office Hours: Monday-2:10 p.m. - 3:00 p.m., Tuesday- 9:00 a.m.-10:55 a.m./ 7:00 p.m.-7:30 p.m., Wednesday- 2:10 p.m. - 3:00 p.m., Thursday- 9:00 a.m.- 10:55 a.m./ 7:00 p.m.-7:30 p.m.
Other times by appointment.
Meeting Days & Time: MW 8:00 a.m.- 9:20 a.m. (Lecture) & 9:30 a.m.-10:50 a.m. (Lab)
Room Number: H36 (Lecture) & H121 (Lab)
Credit Hours: 4 Semester Hours

STEM Division:
Office Hours: 8:00 a.m. – 5:00 p.m.     Monday - Friday
Office Phone: 214-860-8649, then 214-860-8760
Office Location: H129

Mission Statement:
Mountain View College empowers people and transforms communities

Course Description: (3 Lecture/3 Lab) 4 credit hours. Anatomy and Physiology I is the first part of a two course sequence. It is a study of the structure and function of the human body including cells, tissues and organs of the following systems: integumentary, skeletal, muscular, nervous and special senses. Emphasis is on interrelationships among systems and regulation of physiological functions involved in maintaining homeostasis.

Prerequisite Required: Biology 1406

Course Materials/Supplies Needed
(3) Dissecting gloves, Goggles (available in the College Bookstore)
(4) Scantrons: ZipGrade answer sheet (50/100 Question Forms). https://www.zipgrade.com/forms/
(5) SUGGESTED: Colored MAP pencils. Loose leaf notebook and dividers for Lecture and Lab notes and assignments.

EDUCATIONAL OUTCOMES: This course is divided into 4 units. All objectives, which are decided by the district curriculum committee, are measurable or observable and will be evaluated. Different modes of instruction will be utilized for presentation and evaluation.
Core Objectives:
1. **Critical Thinking Skills** - to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
2. **Communication Skills** - to include effective development, interpretation and expression of ideas through written, oral and visual communication
3. **Empirical and Quantitative Skills** - to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions
4. **Social Responsibility** - to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities

Course Objectives

**Student Learning Outcomes**
Upon successful completion of this course, students will:
1. Use anatomical terminology to identify and describe locations of major organs of each system.
2. Explain interrelationships among molecular, cellular, tissue, and organ functions in each system.
3. Describe the interdependency and interactions of the systems.
4. Explain contributions of organs and systems to the maintenance of homeostasis.
5. Identify causes and effects of homeostatic imbalances.
6. Describe modern technology and tools used to study anatomy and physiology.

**Student Learning Outcomes for Laboratory**
The lab provides a hands-on learning experience for exploration of human system components and basic physiology. Systems to be studied include integumentary, skeletal, muscular, nervous, and special senses.
Upon successful completion of this course, students will:
1. Apply appropriate safety and ethical standards.
2. Locate and identify anatomical structures.
3. Appropriately utilize laboratory equipment, such as microscopes, dissection tools, general lab ware, physiology data acquisition systems, and virtual simulations.
4. Work collaboratively to perform experiments.
5. Demonstrate the steps involved in the scientific method.
6. Communicate results of scientific investigations, analyze data and formulate conclusions.
7. Use critical thinking and scientific problem-solving skills, including, but not limited to, inferring, integrating, synthesizing, and summarizing, to make decisions, recommendations and predictions.

**Class Procedures:** Successful completion of this course should be accomplished if you:
1) study and read the textbook;
2) complete the chapter reviews;
3) attend each class, turn in all assignments on time, and participate in all discussions;
4) use the resources available on eCampus and check the weekly assignments on eCampus each week;

**LECTURES—Lecture topics will be covered on eCampus.**
**LECTURE EXAMS:** Lecture examinations will be given at the Testing Center. See course calendar for exam dates. You can access the exams in the blackboard examination tab. Follow instructions provided prior to taking exam. You will have a week to get to the testing center. The hours are available on the college website. [https://www.mountainviewcollege.edu/apply-reg/testing/pages/testcntrs.aspx](https://www.mountainviewcollege.edu/apply-reg/testing/pages/testcntrs.aspx)

The testing center is also open on the weekends, so you should have plenty of time to plan on taking your exams, especially considering you can see the due dates in advance. To prevent academic dishonesty,
exams are not to be taken outside the testing center. The exams are timed, so please be prepared beforehand, otherwise you will not be able to make it through the exam successfully.

Needed to take lecture exam:
- In the event of a missed exam the instructor must be notified within 24 hours of the scheduled exam and documentation will be required for absence. **EXAMS WILL NOT BE ADMINISTERED AFTER THE DEADLINE.**
- **LATE WORK WILL NOT BE ACCEPTED AFTER THE ASSIGNED DUE DATE WITHOUT A VALID EXCUSE.**
- Study Guides, Study Sheets and Outlines for Lecture Exams are posted on eCampus at the instructor’s convenience and discretion.
- **CELL PHONES AND OTHER ELECTRONIC DEVICES ARE NOT PERMITTED TO RING IN THE CLASS OR LAB. PLEASE SET ON SILENT OR VIBRATE. IN SOME CASES, CELL PHONES CAN BE USED AS TECHNOLOGY TO EXPLORE CLASS ASSIGNMENTS.**
- **PLEASE DO NOT SEND OR RECEIVE TEXT MESSAGES IN CLASS OR LAB. STUDENTS WHO BRING COMPUTERS TO CLASS WILL ONLY BE ALLOWED TO USE THEM FOR CLASSWORK.**

LABORATORY:
**ATTENDANCE IS MANDATORY** and each exercise requires FULL laboratory participation for full credit.
- Instructions are given at the beginning of each lab and **WILL NOT be repeated.**
- Gloves and goggles are **required** for all Dissection labs and labs using chemicals. **Please purchase them before class** (see Course Calendar). **NO GLOVES, NO GOGGLES, NO LAB!**
- **HAZARDOUS MATERIALS ARE USED IN THE LABORATORY AREAS. SAFETY DATA SHEETS (SDS), REQUIRED BY OSHA, ARE AVAILABLE FOR ALL STUDENTS TO OBSERVE UPON REQUEST.**
- Study Guides for Lab Exams are posted on eCampus at the instructor’s convenience and discretion.
- **CHILDREN ARE NOT ALLOWED IN THE LABORATORY OR UNSUPERVISED ON CAMPUS AT ANY TIME.**
- **EATING AND/OR DRINKING AND APPLYING MAKE-UP ARE NOT ALLOWED IN THE LABORATORY OR LECTURE ROOMS AT ANY TIME.**

LABORATORY EXAMS:
**LAB EXAMS MUST BE TAKEN DURING THE SCHEDULED LAB EXAM TIME** (see course calendar).

Evaluation Procedures: % weighted total will be negotiated between the instructor and students on the first class day. Assignment rubrics will be negotiated between the instructor and students.

**Lecture Exams = ___% of the Final Grade**
- 4 Lecture Exams worth 100 points each (multiple choice and short essay questions). ZipGrade answer sheet will be required (100 count pdf).

**Laboratory Practicals = ___% of the final grade**
- 4 laboratory practicals worth 100 points each. ZipGrade answer sheet will be required (100 count pdf).

**Assignments = ___% of the final grade**
COURSE & EXAMINATION OUTLINE

UNIT 1
LECTURE EXAM #1 - EXAMS WILL BE TAKEN ONLINE AT THE TESTING CENTER; Textbook Chapters 1, 2 & 3
Topics: Homeostasis, Chemistry, Organic Chemistry, Cells, Cell Cycle and Mitosis, Cell Membranes, DNA RNA and Protein Synthesis
LABORATORY EXAM #1 – ZIP GRADE ANSWER SHEET. BRING YOUR CALCULATOR.
Topics: Safety, Microscope, Metric System, Membrane Function, Cells, Mitosis, Amino Acids, Protein, and Protein Synthesis

UNIT 2
LECTURE EXAM #2—EXAMS WILL BE TAKEN ONLINE AT THE TESTING CENTER; Textbook Chapters 1, 4-6
Topics: Anatomical Orientation and Terminology, Tissues, Integumentary System, Skeletal System
LABORATORY EXAM #2 – ZIP GRADE ANSWER SHEET. ONE HOUR TIME LIMIT.
Topics: Tissues, Skin, Anatomical orientation, and Bones

UNIT 3
LECTURE EXAM #3— EXAMS WILL BE TAKEN ONLINE AT THE TESTING CENTER; Textbook Chapters 8—10
Topics: Articulations (Joints), Muscles and Muscle Physiology
LABORATORY EXAM #3 - ONE HOUR TIME LIMIT.
Topics: Joints (Articulations) and Muscles (Human)

UNIT 4
LECTURE EXAM # 4- EXAMS WILL BE TAKEN ONLINE AT THE TESTING CENTER; Textbook Chapters 11-15
LABORATORY EXAM #4 – ZIP GRADE ANSWER SHEET. ONE HOUR TIME LIMIT.
Topics include: Neuron, Spinal Cord, Meninges, Brain, Cranial Nerves, Special Senses (Eye, Ear, Taste, Smell)

Instructor Attendance Policy:
• Students are expected to attend all classes. Students have the responsibility to attend class and to consult with the instructor when an absence occurs. If for some reason you must leave class early, you should inform the instructor prior to the start of class of your reason for leaving early. On-time attendance is vital to your success in this course. Plan to arrive early. On-time attendance is taken at the beginning of class.

Student Expectations:
• Students will develop personal responsibility in the areas of on-time attendance, completing all assignments on time, studying 12-15 hours per week outside of class, and bringing the textbook to class. Students should also be prepared to engage by asking questions and discussing the material being covered in groups and with the instructor.

Late Work Policy:
• Students must contact the instructor if they will miss class or the due date for an assignment within 24 hours.
• Documentation of an excused absence is required. Arrangements must be made with the instructor to make-up a quiz, exam, or assignment.
• Work is due at the beginning of class on the due date! Small groups will discuss assignments on the due date. Unexcused late work will not be accepted more than 24 hours after the due date. Twenty points will be deducted from unexcused late work.
**Makeup Exam Policy:**
- Students must contact the instructor if they will miss an exam within 24 hours of the due date.
- Documentation of an excused absence is required.
- Arrangements must be made with the instructor to make-up an exam.
- Points may be deducted at the instructor’s discretion.

You will not be eligible for extra credit/bonuses on tests or curves if you have more than two unexcused tardies or absences.

**GRADE POSTING:**
Grades are posted on eCampus. Look under the tools button on eCampus to access your grades. You can also click on the Start Here button, and then click on My Grades.

**GRADING SCALE:**
- A = 90% - 100%
- B = 80% – 89.9%
- C = 70% – 79.9%
- D = 60% – 69.9%
- F = 59.9%

**eCampus:**
- Students are encouraged to use the resources available on eCampus regularly.
- Go to the website: http://ecampus.dcccd.edu. Your login is an “e” and your seven-digit student identification number (example: e7654321). If you have never used eCampus before, your password is the same as your user name until you change it under personal information.

**College Sponsored Events:** Please contact your instructor if you will miss class for a college sponsored event.

**Electronic Devices:** Students are expected to silence all cell phones and other electronic devices during class time and only use them for class purposes. Students may not text or receive texts during class. Students may not use headphones during class. If you need to step out to answer an important phone call, please do so without being disruptive.

**The last day to withdraw from class is Wednesday, April 17th, 2019.**
- Please speak with me if you are having difficulty in the course.
- Students often drop courses when help is available that would enable them to continue. I hope you will discuss your plans with your instructor if you feel the need to withdraw. There will be midsemester and final semester check ins you will receive to provide you with an idea of your academic standing. If you are struggling mid-semester, I will request a meeting with you so we can work on ensuring you are successful in the course.

**Academic Dishonesty:**
Students caught cheating or plagiarizing an assignment will receive a “0” on the assignment or test and be subject to an “F” in the course.

**eConnect:** Your final grade will be posted to eConnect in the **Weighted Grade Column.**

**Disclaimer:**
The instructor reserves the right to change the course calendar and syllabus if needed. Any changes will be announced in class and posted on eCampus.
**FINANCIAL AID**: Students must begin attendance in all classes of enrollment. NO EXCEPTIONS. Financial Aid will not be granted to students who have been certified as not attending, by the certification date. For this lecture course, your physical participation in class, on or before the certification date will allow you to receive credit for FA purposes. For certification dates, check with the division or FAO for further information. Students who are not certified as beginning class, are responsible for any payments due as a result of non-certification, to include the dropping of courses.

**Institutional Policies**: Please visit [http://www.mountainviewcollege.edu/](http://www.mountainviewcollege.edu/) for a complete list of institutional policies (Stop Before You Drop; Withdrawal Policy; Repeating a Course; Financial Aid; Academic Honesty; Americans with Disabilities Act Statement; Religious Holidays; and Campus Emergency Operation Plan and Contingency Plan.).

**Institutional Policies relating to this course can be accessed from the following link**: [http://www.mountainviewcollege.edu/syllabipolicies](http://www.mountainviewcollege.edu/syllabipolicies)


<table>
<thead>
<tr>
<th>MONDAY</th>
<th>WEDNESDAY</th>
</tr>
</thead>
<tbody>
<tr>
<td>LEC: CHEMISTRY-CH 2</td>
<td>LEC: ORIENTATION</td>
</tr>
<tr>
<td>1/28</td>
<td>1/23</td>
</tr>
<tr>
<td>LEC: CELLS &amp; CELL MEMBRANES-CH 3</td>
<td>LEC: ORGANIC CHEMISTRY-CH 2 &amp; CELLS- CH. 3</td>
</tr>
<tr>
<td>2/4</td>
<td>1/30</td>
</tr>
<tr>
<td>LEC: DNA, RNA, &amp; PROTEIN SYNTHESIS-CH 3</td>
<td>LEC: CELLULAR DIVISION &amp; CELL CYCL- CH 3</td>
</tr>
<tr>
<td>LAB: MATERIAL REVIEW</td>
<td>LAB: CELL STRUCTURES &amp; MITOSIS [E5: L4]</td>
</tr>
<tr>
<td>2/11</td>
<td>2/6</td>
</tr>
<tr>
<td>LEC: ANATOMICAL ORIENTATION CH-1</td>
<td>LEC: TISSUES CH 4</td>
</tr>
<tr>
<td>2/18</td>
<td>2/20</td>
</tr>
<tr>
<td>LEC: TISSUES-CH 4 (CONTINUED) &amp; INTEGUMENTARY SYSTEM-CH 5</td>
<td>LEC: SKELETAL SYSTEM-CH 6</td>
</tr>
<tr>
<td>LAB: INTEGUMENTARY SYSTEM [E6: L1, L2, &amp; L4]</td>
<td>LAB: SKELETAL SYSTEM (BONE STRUCTURE &amp; FUNCTION) [E7: L1, L2, &amp; L4]</td>
</tr>
<tr>
<td>2/25</td>
<td>2/27</td>
</tr>
<tr>
<td>LEC: SKELETAL SYSTEM- CH 7 (AXIAL &amp; APPENDICULAR)</td>
<td>LEC: SKELETAL SYSTEM- CH 7 (AXIAL &amp; APPENDICULAR)</td>
</tr>
<tr>
<td>LAB: AXIAL SKELETON [E9]</td>
<td>LAB: APPENDICULAR SKELETON [E10]</td>
</tr>
<tr>
<td>3/4</td>
<td>3/6</td>
</tr>
<tr>
<td>SPRING BREAK 3/11-3/15</td>
<td></td>
</tr>
<tr>
<td>LEC: JOINTS &amp; ARTICULATIONS-CH 8 UNIT II EXAM DUE BY 03/23/2019 AT TESTING CENTER</td>
<td>LEC: MUSCLES AND MUSCLE TISSUE-CH 9 &amp; 10</td>
</tr>
<tr>
<td>LAB: UNIT II LAB EXAM</td>
<td>LAB: JOINTS &amp; ARTICULATIONS [E11: L1-L5]</td>
</tr>
<tr>
<td>3/18</td>
<td>3/20</td>
</tr>
<tr>
<td>LEC: MUSCLES AND MUSCLE TISSUE CH 9 &amp; 10</td>
<td>LEC: THE MUSCULAR SYSTEM-SKELETAL MUSCLES CH 9 &amp; 10</td>
</tr>
<tr>
<td>3/25</td>
<td>3/27</td>
</tr>
<tr>
<td>LEC: CONTENT OVERVIEW/ UNIT III LECTURE EXAM DUE IN TESTING CENTER BY 04/06/2019</td>
<td>LEC: INTRODUCTION TO NERVOUS SYSTEM-CH11</td>
</tr>
<tr>
<td>LAB: SKELETAL MUSCLE ID (CONT.)</td>
<td>LAB: UNIT III LAB EXAM</td>
</tr>
<tr>
<td>4/1</td>
<td>4/3</td>
</tr>
<tr>
<td>Date</td>
<td>LEC: CENTRAL NERVOUS SYSTEM: SPINAL CORD AND SPINAL NERVES -</td>
</tr>
<tr>
<td>-------</td>
<td>---------------------------------------------------------------</td>
</tr>
<tr>
<td>4/8</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>LEC: CENTRAL NERVOUS SYSTEM: HIGHER CENTERS</td>
</tr>
<tr>
<td></td>
<td>LAB: BRAIN STRUCTURE &amp; FUNCTION [E20: L1-L10]</td>
</tr>
<tr>
<td>4/15</td>
<td></td>
</tr>
<tr>
<td></td>
<td>LEC: AUTONOMIC NERVOUS SYSTEM-CH 14</td>
</tr>
<tr>
<td>4/22</td>
<td></td>
</tr>
<tr>
<td></td>
<td>LEC: SPECIAL SENSES: CHEMICAL SENSES-TASTE AND SMELL</td>
</tr>
<tr>
<td>4/29</td>
<td></td>
</tr>
<tr>
<td></td>
<td>LEC: CONTENT OVERVIEW</td>
</tr>
<tr>
<td></td>
<td>LAB: UNIT IV PRACTICAL REVIEW</td>
</tr>
<tr>
<td>5/6</td>
<td></td>
</tr>
<tr>
<td></td>
<td>LEC: UNIT IV EXAM TAKEN IN CLASS</td>
</tr>
<tr>
<td></td>
<td>LAB:</td>
</tr>
<tr>
<td>5/13</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>5/15</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>