ANATOMY AND PHYSIOLOGY II
BIOLOGY 2402.63002
LECTURE—TBA
LAB—TUESDAY AND THURSDAY 11:00 AM–12:20 PM; H-123
SPRING 2016 (1/20/16—5/12/16)

DEBBY SUTTON
OFFICE: H-126
EMAIL: dsutton@dccc.edu
OFFICE PHONE (214) 860-8756
OFFICE HOURS M—R 7:15—8:00 AM, M & W 2:15-5:30 PM
T & R—12:30—2:30 PM
ADDITIONAL HOURS BY APPOINTMENT

SCIENCE/ALLIED HEALTH/PE
DIVISION PHONE 214-860-8760
DIVISION OFFICE H-129; W147
OFFICE PHONE (214) 860-8836
LAB PHONE: 214-860-8737

COURSES DESCRIPTION: (3 lec, 3 lab). 4 credit hours. Anatomy and Physiology II is the second part of a two-course sequence. It is a study of the structure and function of the human body including the following systems: endocrine, cardiovascular, immune, lymphatic, respiratory, digestive (including nutrition), urinary (including fluid and electrolyte balance), and reproductive (including human development and genetics). Emphasis is on interrelationships among systems and regulation of physiological functions involved in maintaining homeostasis. This course is transferable.

PREREQUISITE: Biology 2401

MATERIALS FOR INSTRUCTION:
1. REQUIRED:
   Scantrons - FIVE 882E
   Dissecting gloves, Goggles (available in the College Bookstore)
2. SUGGESTED:
   Colored MAP pencils.
   Loose leaf notebook and dividers for Lecture and Lab notes and assignments.

CORE OBJECTIVES:
- Critical Thinking Skills - to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
- Communication Skills - to include effective development, interpretation and expression of ideas through written, oral and visual communication
- Empirical and Quantitative Skills - to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions
- Teamwork - to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal

EDUCATIONAL OUTCOMES: This course is divided into 3 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.

LECTURE 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 covered.
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

LAB: The lab provides a hands-on learning experience for exploration of human system components and basic physiology. Systems to be studied include endocrine, cardiovascular, immune, lymphatic, respiratory, digestive (including nutrition), urinary (including fluid and electrolyte balance), and reproductive (including human development and genetics).

LAB LEARNING OUTCOMES
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.

**ATTENDANCE**—**ATTENDANCE IS MANDATORY** and class participation is expected. It is important that you arrive on time to class and prepared by reading the assignment before class. Students are responsible for attending classes in which they are enrolled. 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. If an absence occurs, you MUST contact your instructor regarding work you have missed. If you are unable to complete this course, **YOU** must withdraw by: **THURSDAY, APRIL 14, 2016** to receive a “W” on your grade report. Withdrawal from a course is a formal procedure, which **YOU** must initiate; your instructor cannot do it for you. You may withdraw at the Admissions or Counseling Offices.

If you stop attending class and fail to withdraw, **YOU** will receive a grade, usually an “F”. **NOTE:** 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. If you are not present in lecture or lab when attendance is taken you will be counted absent. You will not be allowed to take quizzes or receive credit for assignments that day.

**COURSE CONTENT AND EXAM TOPIC SUMMARY**

**LECTURE EXAM FORMAT:** TRUE AND FALSE, MULTIPLE CHOICE AND MATCHING

**UNIT #1 LECTURE EXAM - PURCHASE ONE #882E SCANTRON:**
Textbook Chapters 19-21, and 24;
Review Carbohydrates, Protein, Lipids, Vitamins & Minerals

**UNIT #2 LECTURE EXAM - PURCHASE ONE #882E SCANTRON:**
Textbook Chapters 22, 23, 26 & 27
- Topics: Lymphatic System, Respiratory System and Urinary System

**LABORATORY EXAM #1 - PURCHASE ONE #882E SCANTRON**
Topics: Digestive System Diagrams, Models, Dissection; Circulatory Diagrams, Models, Cat and Human Blood Vessels, Blood Pressure and Blood Cell Observation; Lymphatic System Diagrams and Questions; Respiratory Models and Diagrams, Spirometry; Urinary Models, Urinary Diagrams, and Urinalysis.

**UNIT #3 LECTURE EXAM - PURCHASE ONE #882E SCANTRON:**
Textbook Chapters 18, 28 and 29
- Topics: Endocrine System, Reproductive System and Embryology

**LABORATORY EXAM #2 - PURCHASE ONE #882E SCANTRON.**
Topics: Endocrine Slides—Hypophysis, Thyroid, Parathyroid, Pancreas, Adrenal, Ovaries, Testes; Reproductive Diagrams and Definitions, Reproductive Models (Male, Female, Cell to Embryo, Meiosis), Embryology, & Fetal Circulation.

**COURSE CALENDAR:** See back page

**CLASS PROCEDURES** – Successful completion of this course **should** be accomplished if **you**:

1) attend and participate in class and lab
2) read and study the textbook and lab manual
3) use the resources available on eCampus (i.e. outlines, study guides, quizzes, study sheets, websites)
4) **ALL STUDENTS MUST HAVE YOUR NAME, COURSE AND SECTION NUMBER, STUDENT ID#, AND FACULTY NAME ON ALL ASSIGNMENTS TO RECEIVE CREDIT.**
LECTURES—Lecture topics will be covered on eCampus with supplemental lectures in class.

1. **LECTURE EXAMS**: Given in class and some may be given in the Testing Center (S-2101) if necessary; phone number 214-860-8571 or in class. See course calendar for exam dates. Unit 3 Lecture Exam given in the classroom.

   - **Needed to take lecture exam**:
     1) #2 pencils
     2) proper Scantron forms (available in the bookstore). You **MUST** use the correct Scantron form (see exam summary) to receive your grade.
     3) MVC Student ID if taken in the Testing Center.
     4) 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 GIVEN PAST THE EXAM DEADLINE.

   - **LATE WORK WILL NOT BE ACCEPTED.**
   - **DO NOT MARK ON THE EXAM BOOKLETS! ANY** marks on the exam booklet will result in the loss of curve on your exam.

   - Study Guides, Study Sheets and Outlines for Lecture Exams are posted on eCampus.

   - **CELL PHONES AND OTHER ELECTRONICE DEVICES ARE NOT PERMITTED TO RING IN THE CLASS OR LAB. PLEASE SET ON SILENT OR VIBRATE.**

   - **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.**

Quizzes over the lecture material can be found on eCampus under the Unit Lecture material. The quizzes are for your personal study and do not count toward your final grade.

**LABORATORY**: ATTENDANCE IS MANDATORY and each exercise requires **full laboratory participation** for full credit.

Attendance will be taken at the beginning of each class period.

- Instructions are given at the beginning of each lab and WILL NOT be repeated. For your safety, students who miss instruction will not be allowed to participate in lab that day and will lose credit for the lab exercise that day.
- Study Guides for Lab Exams are posted on eCampus.
- 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. MATERIAL SAFETY DATA SHEETS (MSDS), REQUIRED BY OSHA, ARE AVAILABLE FOR ALL STUDENTS TO OBSERVE UPON REQUEST.**
- **CHILDREN ARE NOT ALLOWED IN THE LABORATORY OR UNSUPervised ON CAMPUS AT ANY TIME.**
- **EATING, DRINKING, CHEWING GUM, OR APPLYING MAKE-UP ARE NOT ALLOWED IN THE LABORATORY AT ANY TIME.**

**LABORATORY EXAMS**: LAB EXAMS **MUST** BE TAKEN DURING THE SCHEDULED LAB EXAM TIME (see course calendar). There is a one-hour time limit for lab exams.

- You are required to purchase a Scantron answer sheet (882E) for lab exams 1 & 2 in the college bookstore.

**GRADING**

- **LECTURE = 65% of Final Grade**—from 3 lecture exams worth 100 points each.
- **LABORATORY = 25% of the Final Grade**—2 Lab Practicals worth 100 points each
- **ASSIGNMENTS = 10% of the Final Grade**—from ASSIGNMENTS posted on eCampus under the Assignments tab and in class quizzes as needed.
- **CURVE**—You will not receive a curve on lecture exams if you are late to class, late turning in assignments, do not participate, are not prepared for class or lab, have too many absences or write on exam booklets.

**GRADING SCALE**:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Points</th>
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<tbody>
<tr>
<td>A</td>
<td>90 - 100</td>
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<tr>
<td>B</td>
<td>80 - 89</td>
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<td>C</td>
<td>70 - 79</td>
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<tr>
<td>D</td>
<td>60 - 69</td>
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<td>F</td>
<td>≤ 59</td>
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**GRADE POSTING**: Individual test grades and assignment grades are posted on eCampus by e + your student ID. eCampus: Students are encouraged to use the resources available on eCampus regularly. Go to the website: [http://ecampus.dcccd.edu](http://ecampus.dcccd.edu). Your login is an “e” and your seven digit student identification number (example: e1234567). Your password is the same as your user name until you change it under personal information. Announcements will be posted on eCampus. A variety of materials will be available to help you learn the required material.

**FINAL GRADE POSTING**: Final grades will be on posted on eConnect.
### Mountain View College Syllabi Information

Please visit [http://www.mountainviewcollege.edu/](http://www.mountainviewcollege.edu/) for a complete list of institutional policies.

<table>
<thead>
<tr>
<th>Institutional Policies</th>
<th>Details</th>
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<tbody>
<tr>
<td><strong>Stop Before You Drop 6Drop</strong></td>
<td>For students who enrolled in college level courses for the first time in the Fall of 2007, Texas Education Code 51.907 limits the number of courses a student may drop. You may drop no more than 6 courses during your entire undergraduate career, unless the drop qualifies as an exception. Your campus counseling/advising center will give you more information on the allowable exceptions. Remember that once you have accumulated 6 non-exempt drops, you cannot drop any other courses with a “W.” Therefore, please exercise caution when dropping courses in any Texas Public Institution of higher learning, including all seven of the Dallas County Community Colleges. For more information, you may access: <a href="https://econnect.dcccd.edu/eConnect/droppingfacts.html">https://econnect.dcccd.edu/eConnect/droppingfacts.html</a></td>
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<tr>
<td><strong>Withdraw Policy</strong></td>
<td>If you are unable to complete this course, it is your responsibility to withdraw formally. The withdrawal request must be received in the Registrar’s Office by the official drop date for this course (see Course Drop Date mentioned earlier in this syllabus). Failure to do so will result in your receiving a performance grade, usually an “F.” If you drop a class or withdraw from the college before the official drop/withdrawal deadline, you will receive a “W” (Withdraw) in each class dropped.</td>
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<td><strong>Repeating a Course</strong></td>
<td>Effective for Fall Semester 2005, the Dallas County Community Colleges will charge additional tuition to students registering the third or subsequent time for a course. This class may not be repeated for the third or subsequent time without paying the additional tuition. Third attempts include courses taken at any of the Dallas County Community Colleges since the Fall 2002 semester. More information is available at: <a href="http://www.dcccd.edu/pc/cost/3rdcrseattmpt/Pages/default.aspx">http://www.dcccd.edu/pc/cost/3rdcrseattmpt/Pages/default.aspx</a></td>
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<td><strong>Financial Aid</strong></td>
<td>Financial Aid will not be granted to students who have been certified as not attending by the certification date. In lecture classes, students must attend class prior to the certification date. Online students should follow the certification procedures as noted within the class syllabus. 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. Students who are receiving any form of financial aid should check with the Financial Aid Office prior to withdrawing from classes. Withdrawals may affect your eligibility to receive further aid and could cause you to be in a position of repayment for the current semester. Students who fail to attend or participate after the drop date are also subject to this policy. If you are receiving financial aid grants or loans, you must begin attendance in all classes. Do not drop or stop attending any class without consulting the Financial Aid Office. Changes in your enrollment level and failing grades may require that you repay financial aid funds.</td>
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<td><strong>Academic Dishonesty</strong></td>
<td>Students that caught plagiarizing an assignment will be subject to an “F” in the course and possible expulsion from the college. Academic honesty is expected, and integrity is valued in the Dallas County Community Colleges. Scholastic dishonesty is a violation of the Code of Student Conduct. Scholastic dishonesty includes, but is not limited to, cheating on a test, plagiarism, and collusion. As a college student, you are considered a responsible adult. Your enrollment indicates acceptance of the DCCCD Code of Student Conduct published in the DCCCD Catalog. More information is available at <a href="https://www1.dcccd.edu/catalog/ss/code.cfm">https://www1.dcccd.edu/catalog/ss/code.cfm</a>.</td>
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<td><strong>ADA Statement</strong></td>
<td>Mountain View College and the Office of Special Services are committed to upholding the laws and the spirit of Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act (ADA) signed in 1990.</td>
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<td><strong>Religious Holidays</strong></td>
<td>Absences for observance of a religious holy day are excused. A student whose absence is excused to observe a religious holy day is allowed to take a make-up examination or complete an assignment within a reasonable time after the absence.</td>
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<td><strong>Campus Emergency Operation Plan and Contingency Plan.</strong></td>
<td>Mountain View College has developed policies and procedures for dealing with emergencies that may occur on campus. A synopsis of emergency procedures can be found at: <a href="http://www.mountainviewcollege.edu/business/police/Pages/emergencyprocedureenglish.aspx">http://www.mountainviewcollege.edu/business/police/Pages/emergencyprocedureenglish.aspx</a>. <strong>Contingency Plan:</strong> Mountain View College has developed an Instructional Contingency Plan for Temporary College Closing for On-Campus Courses. Please discuss this contingency plan with your instructor. For distance learning courses, your instructor will use email to contact students in the event of extended technology downtime. To assure work in the class continues, it is important for all students to have an accurate email address recorded in both eCampus and eConnect.</td>
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<td><strong>Disclaimer Reserving Right to Change Syllabus</strong></td>
<td>The instructor reserves the right to amend a syllabus as necessary.</td>
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<td>TUESDAY</td>
<td>THURSDAY</td>
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| 1/19    | LEC: ORIENTATION  
LAB: LAB SAFETY AND MSDS VIDEO |
| 1/21    | LEC: DIGESTIVE SYSTEM—CH 24  
LAB: DIGESTIVE MODELS AND DISSECTION |
| 1/26    | LEC: BLOOD—CH 19  
LAB: CIRCULATORY DIAGRAMS; BLOOD CELL IDENTIFICATION |
| 1/28    | LEC: INDEPENDENT STUDY; REVIEW DIGESTIVE SYSTEM AND BLOOD; VIEW THE ECAMPUS POWER POINT ON THE HEART  
LAB: INDEPENDENT STUDY |
| 2/2     | LEC: REVIEW BLOOD—CH 19 & THE HEART—CH 20  
LAB: HEART DIAGRAMS; CIRCULATORY MODELS |
| 2/4     | LEC: BLOOD VESSELS AND CIRCULATION—CH 21  
LAB: CIRCULATORY DIAGRAMS; DISSECTION – SHEEP HEART; CIRCULATORY MODELS  
*ASSIGNMENT (CASE STUDY) DUE* |
| 2/9     | LEC: CIRCULATORY SYSTEM—CH 23  
LAB: RESPIRATORY AND URINARY MODELS AND DIAGRAMS |
| 2/11    | LEC: URINARY SYSTEM—CH 26 & 27  
LAB: DISSECTION - CAT RESPIRATORY AND SHEEP KIDNEY |
| 2/16    | UNIT I LECTURE EXAM DEADLINE  
IN THE TESTING CENTER—CH 19-21, & 24 |
| 2/18    | LEC: INTRODUCTION TO LYMPHATIC SYSTEM—CH 22  
LAB: LYMPHATIC SYSTEM DIAGRAMS AND MODELS; REVIEW UNIT 1  
LAB MODELS AND DIAGRAMS |
| 2/23    | LEC: LYMPHATIC SYSTEM—CH 22  
LAB: RESPIRATORY RESPIRATIONS |
| 2/25    | LEC: RESPIRATORY SYSTEM—CH 23  
LAB: RESPIRATORY & URINARY MODELS & SPIROMETRY |
| 3/1     | LEC: RESPIRATORY SYSTEM—CH 23  
LAB: RESPIRATORY AND URINARY MODELS AND DIAGRAMS |
| 3/3     | LEC: URINARY SYSTEM—CH 26 & 27  
LAB: DISSECTION - BLOOD VESSELS |
| 3/8     | SPRING BREAK 3/14—3/18 |
| 3/10    | LEC: URINARY SYSTEM—CH 26; COMPLETE UNIT II  
LAB: REVIEW |
| 3/22    | LEC: INDEPENDENT REVIEW  
LAB: UNIT 1 & 2 LAB EXAM |
| 3/24    | UNIT 2 LECTURE EXAM DEADLINE IN THE TESTING CENTER  
CH 22—23, 26 & 27 |
| 3/29    | LEC: THYROID & PARATHYROID—CH 18  
LAB: ENDOCRINE SLIDES—HYPOPHYSIS; THYROID & PARATHYROID |
| 4/5     | LEC: TESTES—CH 28  
LAB: ENDOCRINE SLIDES—TESTES & SPERM |
| 4/7     | LEC: OVARIIES—CH 28  
LAB: ENDOCRINE SLIDES—OVARY |
| 4/12    | LEC: FERTILIZATION & EMBRYOLOGY—CH 29  
LAB: COMPLETE ALL MODELS & DIAGRAMS & FETAL CIRCULATION  
*ASSIGNMENT (GROUP PROJECT—FEEDBACK LOOPS) DUE* |
| 4/14    | LEC: COMPLETE FERTILIZATION & EMBRYOLOGY  
LAB: REVIEW ALL UNIT 3 SLIDES, MODELS AND DIAGRAMS;  
MOCK ENDOCRINE LAB EXAM |
| 4/19    | LEC: FERTILIZATION & EMBRYOLOGY—CH 29  
LAB: COMPLETE ALL MODELS & DIAGRAMS & FETAL CIRCULATION  
MOCK ENDOCRINE LAB EXAM |
| 4/21    | LEC: COMPLETE UNIT 3  
LAB: MOCK ENDOCRINE EXAM |
| 4/26    | LEC: COMPLETE UNIT 3  
LAB: MOCK ENDOCRINE EXAM |
| 4/28    | LEC: REVIEW UNIT 3  
LAB: LAB EXAM (UNIT #3) |
| 5/3     | UNIT 3 LECTURE EXAM—ENDOCRINE, REPRODUCTIVE AND EMBRYOLOGY—IN CLASS  
CH—18, 28 & 29 |
| 5/5     | SEMESTER ENDS TODAY |
| 5/10    | 5/12 |