BIOL 2401: HUMAN ANATOMY AND PHYSIOLOGY
ONLINE COURSE SYLLABUS
Spring, 2019

Instructor: Dr. Grace Rutherford
Email: grutherford@dcccd.edu
Technical Support: Connect 800-331-5094, eCampus 972-669-6402

Course Description
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. The lab provides a hands-on learning experience for exploration of human system components and basic physiology. Emphasis is on interrelationships among systems and regulation of physiological functions involved in maintaining homeostasis. This is a transferable Major’s course intended for those seeking to complete a Bachelor’s Degree. (3 Lec., 3 Lab.)

Textbooks (Lecture and Lab)
• Connect with LearnSmart and LearnSmart labs and APRevealed Access for Anatomy and Physiology An Integrative Approach, 3rd edition, McKinley ISBN 9781260574135
  o Access comes with an eBook so an actual textbook is NOT required.
  o Access comes with most lab content so a lab manual is NOT required.

The eCampus course includes specific information about how to register for this specific course in McGraw-Hill Connect to ensure you purchase the correct course access. A FREE 2-week trial is available to enable you to participate in the course initially. Purchasing access code early will NOT give you access to online course materials BEFORE class.

Required course materials are available from McGraw Hill (publisher) directly through the course or from the El Centro Bookstore.

A student of El Centro College is not under any obligation to purchase a textbook from a university-affiliated bookstore. The same textbook may also be available from an independent retailer, including an online retailer. THECB TAC Rule 4.218 (c). The required online materials for this course are only available from the vendors specified above.

Course Prerequisites
Required: BIOL 1406 with a grade of "C" or better within the last three years or satisfactory score on the Biology CLEP exam. Students must be college level ready in Reading and Writing.

Time Commitment
Successful performance in the course will take a time commitment of approximately 12-15 hours/week of your time.

Technical Support
Although the system that you will be using for this course can be reached through the computer labs at any DCCCD campuses, the student is responsible for required equipment and technical support. If you are having problems with:

➢ Connect, please call 800.331.5094
➢ eCampus, please call 972.669.6402

Minimum Technology Requirements
Minimum Technical Skills
Students must be able to:
• Use a web browser and may occasionally need to use Mozilla FireFox browser
• Add an attachment to an email
• Post and reply to the discussion board
• Open PDF files
• Edit a MicroSoft doc file
• Submit an assignment in eCampus

Required Technologies
• PDF reader – click the link to download a free reader: Adobe Acrobat
• McGraw-Hill Connect Access to Course (must purchase)
• Access to a computer (mobile devices alone are NOT adequate)
• Email account
• Reliable internet connection
• Word processing program that can save files as .doc or .docx

Attendance/Participation
Students are required to document attendance and participation in this course through participation and completing assignments, tests and exams on time. Changes and other important information will be posted via e-mail and being unaware of the available information will not be accepted as an excuse for failing to comply with it.

Contacting Instructor
The best way to reach the instructor is by email. The instructor will reply by email within 24-48 hours, Monday through Friday. The instructor is not available on holidays. An email sent Friday afternoon may not be read until Monday afternoon. I reply to every email I receive. If you do not receive a reply within 24 hours (M-F), email again and check your spam for a reply. If you have not received a reply within 48 hours, CALL me and leave a voice message because I am not receiving your emails.

Extra Credit Policy
Please do not ask, no extra credit points are allowed. I must treat everyone the same due to the competitive nature of this course.

Study Guides
• With the exception of chapters 8 and 11, a study guide is listed for each chapter. This is your primary study tool for the exams. It outlines what you need to know for lecture and lab. Do NOT turn in for a grade. The study guide for each chapter is located in the chapter folder under Assignments in eCampus.

Grade Determination
The grade for the course will be based on a total of 1000 points distributed as follows:

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Possible Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orientation Quiz</td>
<td>16 points</td>
</tr>
<tr>
<td>LearnSmart</td>
<td>130 points (lowest dropped)</td>
</tr>
<tr>
<td>LearnSmart Labs (3)</td>
<td>30 points</td>
</tr>
<tr>
<td>Chapter/Lab Quizzes</td>
<td>130 points (lowest dropped)</td>
</tr>
<tr>
<td>Chemistry Lab Project</td>
<td>10 points</td>
</tr>
<tr>
<td>Integument Project</td>
<td>24 points</td>
</tr>
<tr>
<td>Nerve Project</td>
<td>60 points</td>
</tr>
<tr>
<td>Proctored Tests (6)</td>
<td>600 points (lowest dropped)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1000 points</strong></td>
</tr>
</tbody>
</table>

The total number of points will be translated into a letter grade as follows:

\[
\begin{align*}
A & = 90 - 100\% \quad 900 - 1000 \text{ points} \\
B & = 80 - 89.9\% \quad 800 - 899 \text{ points} \\
C & = 70 - 79.9\% \quad 700 - 799 \text{ points} \\
D & = 60 - 69.9\% \quad 600 - 699 \text{ points} \\
F & = \text{below 60}\% \quad \text{Below 600 points}
\end{align*}
\]
• Your current grade can be calculated by 1) adding all of your points (number earned), 2) adding the points you would have received if you had made perfect scores on the same assignments (points possible), then 3) dividing the number earned by the points possible.

• Assignment scores are located under the Report tab in the upper right hand corner of your Connect course page. Your course grades are located in the course on eCampus. **Always verify that the correct score was posted from Connect to eCampus.**

**Student Status Reports**
A status report on your class progress will be made weeks 6 and 10 during the semester. You should be able to view this in DCCCD eConnect. I also post an announcement explaining current possible points according to assignment due dates and points required for passing at that time.

**Assignments and Tests**

**Learn Smart Assignment**
- *Required* for each chapter. Learn Smart assignment **MUST be completed within the week assigned for full credit of 10 points. No late work accepted.** Program opens with a tutorial which may be accessed at any time. **Always check your score in Connect to ensure you have completed AND submitted the assignment.**
  - Due at 11:59 PM Friday of the week assigned.

**Lab Homework**
- **APR** - Most of the lab homework will consist of APR. APR Lab Homework is NOT submitted directly for a grade. However, APR lab work questions will comprise 1/3rd of Chapter and Proctored Test points. Program includes a tutorial that can be accessed at any time. Chapter 1 Study Guide also includes a tutorial.

- **Learn Smart Labs** - In addition to APR, 4 chapters contain LS Labs worth 10 points each. Like LS Assignments, they can NOT be submitted late. **Late work will receive a zero.** Questions from those labs will also be located on the chapter and proctored tests. Program provides a virtual lab assistant that guides you through the assignment. **Always check your score in Connect to ensure you have completed AND submitted the assignment**
  - Due at 5:00 PM Friday of the week assigned.

**Chapter / Lab Quizzes**
- *Required* for each chapter. Quizzes consist of 10 questions/10 points possible for each quiz. The quizzes are designed to be taken at home WITH YOUR BOOK CLOSED!! **A 15% deduction will be taken for exceeding the time limit and 10% deduction will be taken for each day late.** Quizzes are due the week they are assigned. **Quizzes will NOT be accepted after the exam is taken. No late assignments will be accepted after the last day of class.**

- Quizzes are designed for you to gauge your understanding of the material prior to taking the Proctored Tests. Students that score below 80% on the quizzes are strongly encouraged to review the material again before proceeding to the next chapter’s material. Should you have repeated difficulty with quizzes, you will be required to take them at a specified location, including under the instructor’s direct supervision at El Centro College.

- The quizzes may include multiple choice, true/false, labeling, identification, and classification questions. Lab quiz questions are taken directly from Anatomy and Physiology Revealed (APR) or Learn Smart Labs.

  - **Always check your score in Connect to ensure you have completed AND submitted the quiz.**
  - Due at 11:59 PM Friday of the week assigned.

**Proctored Tests**
- Each Proctored Test consists of 60 multiple choice and true false questions @ 2 points each worth a total of 120 points. The questions are composed of lab (1/3) and lecture (2/3) material questions. The tests can be accessed through the **Proctored Tests title** at the top of eCampus or the Connect course page. When you click on the desired test, you will be prompted for a password that a testing center
employee will enter for you. The results for the proctored tests are score only. If you wish to review the questions with correct answers, please make an appointment with your instructor.

- Typically, unless otherwise noted, proctored exams are proctored at the El Centro, North Lake, Brookhaven, or Eastfield Assessment/Testing Centers. Cedar Valley, Mountain View, and Richland are NOT approved proctoring locations.
- Proctored Tests will only be available the days they are scheduled in the syllabus (see Course Schedule on the last 2 pages of this document). It is the student’s responsibility to verify the Testing Center hours and to adjust their schedule accordingly to take the test in the prescribed time. Saturday testing should be completed early to allow for lines and unforeseen campus closures. There is a 15% deduction taken for exceeding the time limit. Any test taken, beyond the due date, will receive a 10% deduction for each day late. No late tests will be accepted after the last day of class. Should you have repeated difficulty with tests, you will be required to take them at a specified location, including under the instructor’s direct supervision at El Centro College.
- Unless otherwise indicated, tests are available during testing center hours Saturday, Monday, and Tuesday. Testing Centers are closed on Sundays. Hours are shorter on Saturdays. Eastfield Testing Center is closed on Saturdays. Testing centers stop taking students at a certain time before closing—contact the testing center for specifics and their policies.
- Distance education students may arrange to take their tests at a local university, military base (if applicable), or college Testing Center. Distance notification, eligibility, and alternate testing location information must be arranged with the instructor within the first week of class. You are responsible for locating a proctor and any fees involved. You must contact the instructor with the name, title, telephone number, and email address of the contact person at the testing center that has agreed to proctor.

Chemistry Lab Project
- This is an individual project you do on your own. It is a special lab using APR animations and is a graded assignment. Multiple attempts are permitted. A 10% deduction will be taken for each day late.

Integument Project
- This is an individual project you do on your own. Project designed to meet THECB required assessment of student’s ability to communicate, think critically, and use empirical and quantitative reasoning. Late work is NOT accepted.

Cranial Nerve Project
- This project includes both group and individual work. Project designed to meet THECB required assessment of student’s ability to communicate and work in teams. Late work is NOT accepted.

Grading Response Time
- All computerized assignments (LearnSmart, Lab Homework, Chapter/Lab Quizzes, and Proctored Tests) are immediately graded with scores appearing immediately in Connect. If a score does NOT appear, email your instructor immediately.
- Projects will be graded within 1-2 weeks after the due date.

Core Curriculum Objectives
Intellectual competencies identified by the Texas Higher Education Coordinating Board (THECB) are available at THECB Intellectual Competencies

BIOL 2401 Student Learning Outcomes (SLOs)
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.
7. Apply appropriate safety and ethical standards.
8. Locate and identify anatomical structures.
9. Appropriately utilize laboratory equipment, such as microscopes, dissection tools, general lab ware, physiology data acquisition systems, and virtual simulations.
10. Work collaboratively to perform experiments.
11. Demonstrate the steps involved in the scientific method.
12. Communicate results of scientific investigations, analyze data and formulate conclusions.
13. Use critical thinking and scientific problem-solving skills, including, but not limited to, inferring, integrating, synthesizing, and summarizing, to make decisions, recommendations and predictions.

Institutional Policies

All El Centro students are responsible for knowing and adhering to the following institutional and course-related policies:

- Institutional Policies
- Course-related Institutional Policies
- DCCCD Office of Institutional Equity Syllabi Statement
- Title IX and Sexual Misconduct
- Concealed Carry (Campus Carry)

Academic Honesty

Academic dishonesty (cheating) will not be tolerated in either lecture or laboratory sections of the course. If cheating is observed, points for that activity will be disallowed, and grades of zero given for cheating may not be dropped. Academic dishonesty includes activities such as copying lab report answers from other students and collaboration with students who have completed Chapter Tests and Proctored Exams. It can be assumed that tests/exams showing the same or similarly missed questions as evidence of dishonesty. All tests involved can receive a score of zero. Also, students missing similar questions when taking the test at or near the same time will be more closely scrutinized. Instructor reserves the right to schedule separate testing times for students.

Withdrawal Policy

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 before the last drop day. It is YOUR responsibility to withdraw from a course. Your instructor cannot initiate this procedure for you. Failure to drop by the deadline will result in your receiving your actual performance grade, usually a grade of “F”. If you drop a class before the official drop/withdrawal deadline, you will receive a “W” (Withdraw) in each class dropped. The last day to drop for this semester is Apr. 17, 2019.

Financial Aid Certification of Attendance

You must attend and participate in your on-campus or online course(s) in order to receive federal financial aid. Your instructor is required by law to validate your attendance in your on-campus or online course in order for you to receive financial aid. You must participate in an academic related activity pertaining to the course but not limited to the following examples: initiating contact with your instructor to ask a question about the academic subject studied in the course; submitting an academic assignment; taking an exam; completing an interactive video; participating in computer-assisted instruction; attending a study group assigned by the instructor; or participating in an online discussion board about academic matters relating to the course. In an online course, simply logging in is not sufficient by itself to demonstrate academic attendance. You must demonstrate that you are participating in your online class and are engaged in an academically related activity such as in the examples described above.

Accessibility

This course has been developed in Blackboard Learn version 9.1. If you require accommodations, please let your instructor know and contact the Disability Services Office at El Centro College.
Links to Accessibility Statements:
- Blackboard (eCampus)
- McGraw-Hill Connect
- Microsoft
- Adobe
- YouTube Accessibility Settings

Course Schedule
This is found on the next page.
<table>
<thead>
<tr>
<th>WEEK</th>
<th>#</th>
<th>ASSIGNMENTS</th>
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</table>
| Jan. 22    | 1  | Complete the Course Orientation under *Start Here*.  
  ➢ *Orientation Quiz Due 11:59 pm Wednesday, Jan. 23*  
  Chapter 1: The Study of Anatomy and Physiology  
  ➢ Complete Ch 1 Learn Smart  
  ➢ Complete APR Lab Homework  
  ➢ Complete Ch 1 / Lab Quiz (due date extended to Saturday, Jan. 20)  
  ➢ *Assignments due 11:59 pm Friday, Jan. 25 (ONLY Quiz is extended)*  
| Jan. 28    | 2  | Chapter 2: Atoms, Ions, and Molecules  
  ➢ Complete Ch 2 Learn Smart  
  ➢ Complete Chemistry Lab project  
  ➢ Complete Ch 2 / Lab Quiz  
  ➢ *Assignments due 11:59 pm Friday, Feb. 1*  
| Feb. 4     | 3  | Chapter 3: Energy, Reactions, & Cellular Respiration  
  ➢ Complete Ch 3 Learn Smart  
  ➢ Complete LS Lab Homework (Enzymes) *(Due by 5 pm Friday)*  
  ➢ Complete Ch 3 / Lab Quiz  
  ➢ *Assignments due Friday, Feb. 8*  
  Proctored Test 1  
  ➢ Material from chapters 1, 2, and 3  
  ➢ Must be taken from 2/9 - 2/12 *(Saturday, Monday, or Tuesday)*  
  ➢ Proctored Test must be taken at a Testing Center.  
| Feb. 11    | 4  | Chapter 4: Biology of the Cell  
  ➢ Complete Ch 4 Learn Smart  
  ➢ Complete LS Lab Homework (Osmosis) *(Due by 5 pm Friday)*  
  ➢ Complete Ch 4 / Lab Quiz  
  ➢ *Assignments due Friday, Feb. 15*  
| Feb. 18    | 5  | Chapter 5: Tissue Organization  
  ➢ Complete Ch 5 Learn Smart  
  ➢ Complete APR Lab Homework  
  ➢ Complete Ch 5 / Lab Quiz  
  ➢ *Assignments due Friday, Feb. 22*  
| Feb. 25    | 6  | Chapter 6: The Integumentary System  
  ➢ Complete Ch 6 Learn Smart  
  ➢ Complete Integument Project  
  ➢ Complete Ch 6 / Lab Quiz  
  ➢ *Assignments are due Friday, Mar. 1*  
  Proctored Test 2  
  ➢ Material from chapters 4, 5, and 6  
  ➢ Must be taken from 3/2 - 3/5 *(Saturday, Monday, or Tuesday)*  
  ➢ Proctored exam must be taken at a Testing Center.  
| Mar. 4     | 7  | Chapter 7: The Skeletal System: Bone Structure and Function  
  ➢ Complete Ch 7 Learn Smart  
  ➢ Complete APR Lab Homework  
  ➢ Complete Ch 7 / Lab Quiz  
  ➢ *Assignments are due Friday, Mar. 8*  
| Mar. 11    | 8  | Spring Break  
| Mar. 18    |     | Chapter 9: The Skeletal System: Articulations  
  ➢ Complete Ch 9 Learn Smart and APR Lab Homework  
  ➢ Complete Ch 9 / Lab Quiz  
  ➢ *Assignments are due Friday, Mar. 22*  
  Proctored Test 3  
  ➢ Material from chapters 7 and 9  
  ➢ Must be taken from 3/23 - 3/26 *(Saturday, Monday, or Tuesday)*  
  Proctored exam must be taken at a Testing Center.  |
<table>
<thead>
<tr>
<th>Date</th>
<th>Page</th>
<th>Chapter</th>
<th>Assignments</th>
</tr>
</thead>
</table>
| Mar. 25 | 9 | Chapter 10: Muscle Tissue | ✓ Complete Ch 10 Learn Smart  
✓ Complete APR Lab Homework  
✓ Complete Ch 10 / Lab Quiz  
✓ Assignments are due Friday, Mar. 29 |
| Apr. 1 | 10 | Chapter 12: Nervous System: Nervous Tissue | ✓ Complete Ch 12 Learn Smart  
✓ Complete APR Lab Homework  
✓ Complete Ch 12 / Lab Quiz  
✓ Assignments are due Friday, Apr. 5  
Proctored Test 4—testing centers may be closed on Saturday  
Material from chapters 10 and 12  
Must be taken from 4/6 - 4/9 (Saturday, Monday, or Tuesday)  
Proctored exam must be taken at a Testing Center. |
| Apr. 8 | 11 | Chapter 13: Nervous System: Brain and Cranial Nerves | ✓ Complete Ch 13 Learn Smart  
✓ Complete APR Lab Homework  
✓ Nerve Project Discussion begins Wednesday, Apr. 10, DAILY DUE DATES  
✓ Assignments are due Friday, Apr. 12  
✓ Nerve Project Discussion ends Wednesday, Apr. 17 (Monday, Apr. 15, is last day to create a thread) |
| Apr. 15 | 12 | Chapter 13: Nervous System: Brain and Cranial Nerves Continued… | ✓ Complete Nerve Project  
✓ Complete Ch 13 / Lab Quiz  
✓ Assignments and Group Member Evaluation are due Friday, Apr. 19  
✓ Nerve Project Paper is due Sunday, Apr. 21 |
| Apr. 22 | 13 | Chapter 14: Spinal Cord and Spinal Nerves | ✓ Complete Ch 14 Learn Smart  
✓ Complete LS Lab Homework (Reflexes) (Due by 5 pm Friday)  
✓ Complete Ch 14 / Lab Quiz  
✓ Assignments are due Friday, Apr. 26  
Proctored Test 5  
Material from chapters 13-14,  
Must be taken from 4/27 -4/30 (Saturday, Monday, or Tuesday)  
Proctored exam must be taken at a Testing Center. |
| Apr. 29 | 14 | Chapter 15: Nervous System: Autonomic Nervous System | ✓ Complete Ch 15 Learn Smart  
✓ Complete APR Lab Homework  
✓ Complete Ch 15 / Lab Quiz  
✓ Assignments are due Friday, May 3 |
| May 6 | 15 | Chapter 16: Nervous System: Senses | ✓ Complete Ch 16 Learn Smart  
✓ Complete APR Lab Homework  
✓ Complete Ch 16 / Lab Quiz  
✓ Assignments are due Friday, May 10 |
| May 13 | 16 | | Proctored Test 6  
Material from chapters 15-16,  
Must be taken from 5/11 - 5/14 (Saturday, Monday, or Tuesday)  
Proctored exam must be taken at a Testing Center.  
No late exams accepted  
Last Class Day is Tuesday May 14 |

Note: The provisions contained in this syllabus do not constitute a contract between the student and El Centro College. These provisions may be changed at the discretion of the Biology Coordinator/Instructor. When necessary, appropriate notice of such changes will be given to the student.