

**El Camino College  
Compton Educational Center  
Division-I  
Biological Sciences  
Fall 2016  
Instructor: Fazal K. Aasi, MD**

**Course: Physiology-31 Human Physiology; Section # 9881**

**Mission Statement of the College:**

El Camino College makes a positive difference in people's lives. We provide excellent comprehensive educational programs and services that promote student learning and success in collaboration with our diverse communities.

**Mission Statement of Biological Sciences Program:**

The mission of the biological sciences program is to:

1. Offer quality educational opportunities for students by providing courses that transfer to four-year institutions
2. Provide associate degrees and certificate courses that meet general education requirements, and
3. Prepare students for entry into various health related fields and programs.

The learning outcomes expected from students completing the biological sciences curriculum include: Rich and current content knowledge, technical abilities to use appropriate scientific equipment, proficiency in expressing scientific content in written form, ability to apply the scientific method, and improved confidence and student attitudes toward biological sciences

**Course Dates:** 08/29/16—12/15/16

**Hours:** Tuesday/Thursday

**Room: Lecture:** 8:00 AM-9:05AM MS 103

**Lab:** 9:15 AM-12:25PM MS 103

**Instructor:** Fazal K. Aasi, MD.

**E-mail:** [faasi@elcamino.edu](mailto:faasi@elcamino.edu)

**Voice mail:** (310)-900-1600 Extension 2316

**Office Hours:** Monday/Wednesday 3:00PM-4:30PM MS118

Tuesday/Thursday 1:00PM-2:00PM MS118

**Primary Text:**

Human Physiology 14<sup>th</sup> Edition  
Stuart Ira Fox  
McGraw Hill

ISBN-13: 978-0-07-783637-5

ISBN-10: 0-07-783637-5

**Supplemental Materials:**

Pens, #2 lead Pencils, good quality eraser, highlighters, **index cards**, “paper” white-out, You will need to provide one unopened package of green, 100 Question scantron forms (Form 882-E) and one package of green, 15 question scantron Form (815-E). Write your name on the outside of the package and turn these in on or before the date of the first quiz.

**Student Biopac** kit from college book store for Physiology Lab (Buy in groups of 4 students)

**Course Description: Physiology-31 Human Physiology**

*4 units; 2 hours lecture, 6 hours lab*

*Prerequisite: Anatomy 32 and Chemistry 20, 21A or 4 with a minimum grade of C*

*Credit, degree applicable*

*Transfer CSU, UC\*; (CAN BIOL 12; Physiology 31, Anatomy 32=CAN BIOLSEQ B)*

**Course Overview:**

This course is a study of cellular physiology and the functional aspects of the following human body systems: circulatory, respiratory, digestive, excretory, reproductive, muscle, nervous and endocrine. In the laboratory, experiments are performed to demonstrate principles discussed in lecture.

This course is designed primarily for those majoring in the Health Sciences. In this course major emphasis will be placed on functions of the human body at cellular, organ, and organ system level. Particular attention will be paid to:

- The relationship between cell/tissue structure and function.
- Introduction and homeostasis
- Cell membrane-structure, and function
- Transport across cell membrane
- Cell to cell adhesion , and cell junctions
- The nervous system including neuronal structure, and function, neuroglia, brain and spinal cord,
- cranial and spinal nerves, and autonomic nervous system.
- Sensory organs
- Muscle physiology
- The cardiovascular system including cardiac structure and cycle, blood vessels and hematopoiesis
- The lymphatic system structures and their role in immunity.
- The respiratory system microscopic and macroscopic structures, gas exchange, and transport. Control of respiration.
- The digestive system organs, mesenteries, and glands. Motility, secretion, digestion, and absorption.
- The urinary system microscopic and macroscopic structures including the process of urine formation. Osmoregulation.
- Fluid and Electrolyte balance
- Acid-Base balance.
- The male and female reproductive structures and their functions. Embryologic development.

- The endocrine system, structure, functions, and abnormalities.

*\*Note: The maximum UC credit allowed for students completing Anatomy 30, Anatomy 32, and Physiology 31 is two courses.*

**Course Prerequisites:** *Recommended Preparation: Anatomy 30 or Biology 10 or Biology 1A;  
English 84*

**Course Objectives:**

In an effort to attain the course goals, students should be able to:

- A. To acquire a basic understanding of the chemical, cellular and molecular mechanisms that underlies the function of living organisms and to be able to use this information to solve physiological problems.
- B. Students will review levels of complexity from atoms and cells up to whole body systems and organisms.
- C. Students will review cell structure and function. Students will investigate cell specialization.
- D. Students will investigate the structure and function of the four basic tissues that build up human bodies (epithelium, connective, muscle and nerve).
- E. Discuss the role of the system, and the organs comprising each of the body's systems (integumentary, skeletal, muscular, nervous etc.).
- F. Explain how a given body system would react to the manipulation of a specified variable.
- G. Utilize the Internet and other computer applications as resources/tools/media for learning Human Physiology concepts.
- H. Interpret medical and scientific terminology based on an understanding of Latin and Greek word parts.
- I. Use their knowledge of functional principles at the genetic, cellular and organ levels to describe the concepts of integrated systems physiology in humans.
- J. Apply these basic physiological principles to strategies for the solution of current and emerging relevant environmental health issues.

**Student Learning Outcomes:**

1. Students will be able to use language appropriate to physiological functions and the health sciences.
2. Students will demonstrate the use of instruments to gather physiological data.
3. Students will be able to describe mechanisms and explain physiological processes that occur in the human body on cellular, organ, systemic, and organismal levels.

### **Instructional Methodology**

- A. Lectures
- B. Labs
- C. Discussions
- D. Multimedia Presentations
- E. Inline Assignments (through ETUDES)
- E. Group Activities

**Assessment Activities:** The following activities will be used to assess mastery of student learning outcomes:

- A. Objective Exams
- B. Quizzes
- C. Lab Practica
- D. Problem based and critical thinking short descriptive questions
- E. In-line assignments using ETUDES
- F. Term paper-writing and presentations

### **Evaluation Criteria:**

- A. Objective questions will test the understanding and memorization of basic physiological concepts.
- B. Problem solving, and analytical questions will test the mastery of the subject and how the students will apply this knowledge to solve problems.
- C. Lab Practica will test the ability of the student to identify gross anatomical structures and related functions. Students will also be tested on problem based questions including case histories and clinical questions.
- D. Term papers/ Presentations/Group projects will foster a spirit of team work, research, writing abilities and public speaking

### **Grading Scale:**

| <b>Description</b> | <b>Letter</b> | <b>Points</b> | <b>GPA</b> |
|--------------------|---------------|---------------|------------|
| Excellent          | A             | 990-1100      | 4.00       |
| Good               | B             | 880-989       | 3.00       |
| Satisfactory       | C             | 770-879       | 2.00       |
| Unsatisfactory     | D             | 660-769       | 1.00       |
| Not competent      | F             | 000-659       | 0.00       |
| Incomplete         | I             |               |            |
| Withdrew           | W             |               |            |

### **Final Grade Calculation**

|                            |     |
|----------------------------|-----|
| Quizzes, Critical Thinking | 100 |
| Lab Work/Homework          | 50  |
| Pop Quizzes/Discussions    | 50  |
| Assignments                | 100 |
| Written Exams (3)          | 300 |
| Lab Exams (3)              | 300 |
| Final Exam                 | 100 |

|           |      |
|-----------|------|
| Lab Final | 100  |
| Total     | 1100 |

### **Review of Grades:**

After every Exam, Quiz or Lab Practicum the grades will be given to students ASAP, and results reviewed. It is students' responsibility to bring any inaccuracies or discrepancies to instructor's notice. No claim would be entertained after that.

Review of all quizzes, exams and lab practica, is done as a part of teaching and learning process and fixing any inaccuracies. During such reviews all cell phones, recorders, laptops or any other recording device should be turned off.

It's students' responsibility to erase their choices completely, if they intend to change an answer on scantron. Incompletely erased answers would be marked as wrong answers by scantron machine and would not be hand corrected by instructor.

Each student would be provided with a "live" individual Grade Calculation Sheet (Excel). Students are responsible for keeping an up to date record of their grades after receiving results of quizzes, lab exercises, exams, lab practica or any other graded class activity.

All graded material (except lab reports) must be returned to instructor, who will keep them for 18 months as required by institutional regulations.

### **Attendance Requirements:**

**Attendance** is the responsibility of the student. On arrival in the class/Lab the students will be required to sign in on the attendance roster. If the student is late more than 10 minutes, he/she must record the time of arrival. At the end of the class the students must sign out. If for any reason the student has to leave early, the time of departure must be noted with signature. If the absences and tardiness/early departures exceed 10% of the total attendance, the student can be dropped.

**A. Tardy Policy:** if you are late more than 10 minutes after the class begins, you will be marked tardy. Three tardies, or early departures equal one absence.

**B. Absence Policy:** If you are absent, it is your responsibility to inform the instructor of your being absent. You are still responsible for the missed lecture, lab or any other class activity of the day. Check your schedule to know the class activities of the day you missed. Contact your instructor or a fellow classmate to know what you missed.

**C. Excused or unexcused absences:** Any absence in which you do not have a justifiable and documentable reason will be an unexcused absence.

### **Statement of Student Conduct:**

#### **Instructor's Expectation of Student Conduct:**

**You are the key to success!** All of you can do well in this course if you're willing to put in the effort. The material covered is not difficult, but there is a **huge** body of knowledge that you must acquire.

1. **Don't miss lecture or lab:** There is simply too much material covered too rapidly to catch up if you get behind. If you must miss a class, get good notes from a classmate, or see me. **Take notes in class, don't just highlight your text.** Students who take notes in class generally learn the material better than those who don't.
2. **Be on time to class:** Students who are late will miss quizzes/announcements that may help them in class.
3. **Keep up by studying regularly:** You will not succeed in this course if you wait until the week before an exam to study. You must study regularly the material as it is presented.
4. **Manage your time well:** Schedule study time **every day**.
5. **Cooperative learning works:** Research has shown that students who study with other students usually perform better on exams. It might be difficult but is worth the effort. Form a small (2, 3 or 4 students) study group and get together to work on review questions.
6. **Study the "right stuff":** The purpose of a lecture is to direct your attention to what you need to know. The notes clearly state what you are expected to learn. Recopying your notes and making flash cards are two essential techniques.
7. **Practice! Practice! Practice!** After learning your notes, put yourself in a test situation by answering each chapter's checkpoint and review questions.
8. **If you're having difficulty, get help early:** The sooner you seek help, the more options I have to improve your learning.
9. **Improve your test-taking skills:** We'll cover this in more detail before the first exam.
10. **Do the Written Assignments, Homework Assignments, and Worksheets!** The written assignments, homework, and worksheets are designed to assist you in learning the course material. Grades are based on the assumption you are completing the Written Assignments, Homework, and Worksheets. Failure to do all the Written Assignments, Homework, and Worksheets may negatively affect your grade.

**Conduct at El Camino College** must conform to the laws of the State of California, district policies, and campus rules, and regulations. The El Camino College faculty, staff and administration are dedicated to maintaining an optimal learning environment; the standards of behavior as outlined in this policy are essential to the maintenance of a quality college environment. These standards will apply to all students on campus, other college property or while attending any college-sponsored event. Violation of such laws,

policies, rules and regulations or behavior adversely affecting suitability as a student, will lead to disciplinary action.

## **B. Misconduct**

1. **Dishonesty**, including but not limited to cheating, plagiarism or knowingly furnishing false information to the College.
2. **Forgery**, alteration, or misuse of college documents, records, or identification.
3. **Violation of college policies** or off -campus regulations, including but not limited to campus regulations concerning student organizations, the use of college Facilities, or time, place, and manner of public expression.
4. **Possession or use of alcoholic beverages** on college property or at any college sponsored event except where allowed as noted in Section 25608 of the Business and Professions Code.
5. **Possession or use of any weapon**, firearm or explosives.
6. The use, sale, or possession on campus, or presence on campus under the influence of any **controlled substance** or any poison classified as such by Schedule D in Section 4160 of the Business and Professions Code.
7. **Continued disruptive behavior**, continued willful disobedience, profanity or vulgarity, or continued defiance of the authority of, or abuse of, college personnel or to anyone on campus.
8. **Willful misconduct** which results in injury or death to a student or college personnel.
9. **Assault, battery, sex crimes** including sexual assault or rape, or any threat of force or violence upon a student or college personnel.
10. **Sexual harassment** which includes unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature.
11. Participation in hazing or commitment of any act that tends to injure, degrade or disgrace a student or college personnel.
12. **Obstruction or disruption of teaching**, research, administration, disciplinary proceedings, or other authorized college activities including but not limited to its community service functions or to authorized activities held off campus. Obstruction or disruption includes but is not limited to the use of skateboards, bicycles, radios, and roller skates.
13. **Unauthorized entry** to or use of college facilities, equipment or supplies.
14. Theft or deliberate damage to property of a college staff member, a student, or a visitor to the college including but not limited to the Library, Bookstore, and Food Service areas.
15. Defacing or damaging any college real or personal property.
16. Failure to comply with the directions of a member of the college certificated personnel, college management or supervisor personnel, or campus police acting within the scope of his or her duties.
17. **Smoking in any area where prohibited** by law or by regulation of the Governing Board.

### **Disruptive Behavior**

Disruptive behavior will not be tolerated and will be dealt with in accordance with college policy and may result in Security intervention. Disruptive behavior includes (but is not limited to) the

harassment of other students or the instructor and inappropriate or unsafe activities with respect to other students, the instructor or supplies. **Ringling or vibrating cell phones or pagers and text messaging are considered disruptive to both the instructor and the entire class.** Cell phones are to be **SHUT OFF** and put away (**NOT** on the desk) before every class. If a cell phone or pager rings, audibly vibrates or is otherwise disruptive during lecture, you may be asked to leave the classroom for the remainder of the class time and automatically lose up to **five points**. Repeated disruptions may result in additional penalties. **If a cell phone or pager rings, audibly vibrates or is otherwise disruptive during any exam or quiz, you may receive a failing grade on that assessment**

### **Cheating or Plagiarism**

Examples of Cheating or Plagiarism are:

Representing the words, ideas or work of another as one's own in any academic exercise (plagiarism), including the use of commercial term paper companies;

Copying or allowing another student to copy from one's paper or answer sheet during an examination;

Allowing another individual to assume one's identity for the purpose of enhancing one's grade in any of the following: testing, field trips or attendance;

Falsifying or attempting to falsify attendance records and/or grade rosters.

### **Consequences for cheating or plagiarism**

Given alleged violation of the Standards of Conduct, any or all of the following actions may be imposed:

1. When there is evidence of cheating or plagiarism in classroom work, students may receive an F for that piece of work or may be suspended from all classes for that term and the following term if deemed appropriate.
2. The instructor may assign a failing grade to the examination or assignment in which the alleged cheating or plagiarism occurred. This action is based on information that the instructor had.
3. The instructor may dismiss the student from the class or activity for the present and/or following class session(s)
4. The instructor may recommend suspension or expulsion of the student from the college as stipulated in BP5138, Section IIB6 and 8. This recommendation must be in accordance with El Camino College's Due Process and Disciplinary Procedures.
5. Complete the Academic Dishonesty Report Form and submit it to the Academic Affairs Office.

### **Late/Missed assignment policy:**

**1. All online assignments must be completed before or by the deadline. No extension would be granted under any circumstances**

2. In the event that a student is absent and an examination is missed he/she will be permitted to take the examination *only* if there is a reasonable, justifiable and documented reason for absence. In that case the make-up Exam must be taken within 2 class sessions from the time he/she returns to class. The highest possible grade a student can obtain in a make-up Exam would be recorded as 80% regardless of how many he/she scored correct above this grade.

3. The make-up examination will only be given *on the student's own time* and should *not* interfere with normal class time. A student who is *not* present for a scheduled exam, quiz, or an assignment will receive a zero (0) score at the discretion of the instructor. A student, present at the time a test is administered is obligated to take the test or he/she will earn a zero (0) score.

4. A Quiz, Lab Quiz and/ or a Lab practicum that is missed due to absence (Excused or unexcused) may *not* be made-up, and a grade of zero (0) will be recorded.

5. If you walk in late and the Quiz is already started, you will not be allowed to take it.

6. If you miss a lab, you can't submit lab report for grading.

**Policy regarding audio taping of lectures:** If you so desire, you can record my lectures after obtaining written permission. At the end of the semester erase all material from your storage devices.

Don't pass the recorded material to any other student/person.

**Safety regulations:** Extreme caution should be exercised in the labs, because of the use of hazardous materials, open flames and sharps. Wear personal protective equipment, like lab coats, safety goggles, and gloves.

Closed shoes must be worn in labs, no sandals or slippers allowed. **Eating, drinking, or applying makeup should be avoided. Wash your hands thoroughly with soap and water after the lab.**

**Lab organization:** Because of the number of laboratory sections routinely scheduled, some of the burden for keeping the lab neat and orderly will fall on you. This includes.

1. Complying with all instructions and rules for working in lab.
2. Returning all equipment and other lab material to appropriate places.
4. Cleaning your desks before and after lab work.
5. **There is Zero tolerance Policy on non-academic use of cell phones, laptops and iPads, text messaging, eating and/ or drinking in classrooms or labs.**

**Note:** Student failing to follow above instructions would lose Two Points from his/her Lab grades.

**Special Accommodations:** Any student who has a disability and has special needs is to alert me of this as soon as possible, so that special accommodations can be made.

**Web Enhancement:**

This is a Web-enhanced course. Lot of useful information and help to excel in your studies is provided at ETUDES, the course management system used by ECC and CEC.

**Etudes log-in instructions**

Below are the login instructions that are posted on the Getting Started in Distance Education webpage on the DE Website:

<http://www.elcamino.edu/library/distance-ed/gettingstarted.asp>

**ETUDES-NG LOGIN INSTRUCTIONS**

On the first day of the semester in which you are officially enrolled in an ETUDES class, you can follow the steps below to access your online course. Please Note: You will not have access to the online course until the first day of the semester unless the Instructor opens the course sooner. Check your MyECC email for additional log-in instructions from your instructor.

**STEP 1:** Go to <https://myetudes.org/> - When you log in for the first time, you will be required to enter two pieces of information: your User ID and your Password (see Steps 2 and 3 below)

**STEP 2:** Enter your User ID. Your User ID is: the same as your user id that you use to login to MyECC . EXAMPLE: Albert Einstein is enrolled in an online ETUDES class and has the following User ID: albert\_einstein [all lower case] \*Some ECC student ID numbers have been adjusted to accommodate multiple persons with the same name. If Step 2 does not work please visit this site to verify your id:  
<https://secure.elcamino.edu/portal/logininfo/main.aspx?item=forgot>

**STEP 3:** Enter your password. Your default Password for Etudes is the month and date of birth included in your ECC record. EXAMPLE: Albert Einstein's birth date is March 25 so his Etudes Password is: 0325.

**STEP 4:** Click Login then click on the Tab to enter your course. You will have access to the course starting on the first day of the semester (and after waiting 24 hours after you registered for the class)

**Etudes Requirements**

Welcome to Etudes -- a teaching, learning, and collaboration environment. This system serves faculty, staff, and learners from Etudes Consortium institutions.

Please review system requirements below:

1. [Computer \(PC and Mac\) and Connectivity Requirements](#)
2. Be sure you are using a supported browser. They are free downloads.
  - o **PC Users:** [Firefox 17 or later](#), [Google Chrome](#), or [Internet Explorer 9](#). For more information, see: [PC Supported Browsers](#).
  - o **Mac users:** Download [Firefox 17](#) or [Google Chrome](#). Mac users must be running OSX 10.3 or above. For more information, see: [Mac Supported Browsers](#).
3. Configure your browser's cache. **Glitches are often due to incorrect "cache" browser settings.**
  - o [PC Browser CACHE Settings](#)
  - o [Macintosh Browser CACHE Settings](#)
4. Configure [cookies](#), [JavaScript](#), [pop-up blocker](#).
5. [Enable mixed content](#) to ensure that you see all media used by your instructors.

Other ISP & browser considerations:

6. [IMPORTANT note for AOL Users!](#) Do NOT use AOL's browser.
7. **Use of Multiple Browser Windows is a no-no!** Avoid this practice, or do it at your own risk! It is easy to log yourself out of one and get logged out of the others, losing what you were working on - assignments, tests, etc. You will be prompted to log back in!

**Disclaimer Statement:**

1. Students will be notified ahead of time when and if any changes are made to course requirements, policies or in schedule for teaching and/or exams.
2. Handouts, Study Guides and additional resources are provided to help students understand the key concepts. These tools in no way replace the text book. So, students are highly recommended to study the text book regularly and thoroughly.

**Semester schedule of topics and assignments:**

Please see attached Lecture/Lab Schedules

| <b>FALL 2016 SEMESTER</b>  |   |
|--|---|
| Online Application Period for Fall Begins  | Sunday, November 1, 2015                |
| Fall 2016 Student Online Registration Begins   | Monday, May 2, 2016                     |
| First Drop for Non-Payment for Fall Classes<br>Deadline - For Students who register April 19 - July 12   | Tuesday, July 12, 2016                  |
| Second Drop for Non-Payment for Fall Classes<br>Deadline - For Students who register July 13 - August 22 | Monday, August 22, 2016                 |
| All Web Registration Ends (Full Semester Classes)  | Friday, August 26, 2016                 |
| Saturday Classes Begin   | Saturday, August 27, 2016               |
| <a href="#">Weekday Classes Begin</a>  | <a href="#">Monday, August 29, 2016</a> |
| Online Add Period and Program Change Period Begins   | Monday, August 29, 2016                 |

|   |   |
|---|---|
| Labor Day Holiday - Campus Closed                                     | Monday, September 5, 2016                                 |
| First Day to Apply for Fall Degrees and Certificates                  | Tuesday, September 6, 2016                                |
| Last Day to Add Classes (Full Semester Classes)                       | Friday, September 9, 2016                                 |
| Last Day to Drop Without Notation on Permanent Record                 | Friday, September 9, 2016                                 |
| Last Day to Drop for an Enrollment Fee Refund (Full Semester Classes) | Friday, September 9, 2016                                 |
| Last Day to Challenge Residency Status for Current Semester           | Friday, September 9, 2016                                 |
| Last Day to Apply for Fall Degrees and Certificates                   | Friday, October 14, 2016                                  |
| Mid-Term Classes Begin  | Saturday, October 22, 2016                                |
| Veteran's Day Holiday - Campus Closed                                 | Friday, November 11, 2016                                 |
| Last Day to Drop with a "W"   | Friday, November 18, 2016                                 |
| Thanksgiving Holiday - Campus Closed                                  | Thursday, November 24 -<br>Sunday, November 27,<br>2016   |
| Last Day of Fall Semester   | Friday, December 16, 2016                                 |
| Winter Recess - Campus Closed   | Friday, December 23, 2016<br>-<br>Monday, January 2, 2017 |

