

DeAnza College Biology Department

# BIOLOGY 40C

## Human Anatomy and Physiology

Instructor: Bob Kalpin

### COURSE SYLLABUS

Spring 2019

<b>Course:</b>	Biology 40C, section 46070 (#1) and 46071 (#2)
<b>Location:</b>	Lecture Room MLC103 Lab Room SC2106
<b>Time:</b>	<u>Lecture</u> M/W 11:30-1:20 <u>Lab</u> M or W 8:30-11:20
<b>Text:</b>	Tortora and Derrickson, "Principles of Anatomy and Physiology", (15th Ed.) ISBN: 9781119437130
<b>Lab Manual:</b>	Marieb, Elaine. "Human Anatomy and Physiol. Laboratory" (13th Ed), ISBN: 9780134806365
<b>Instructor:</b>	Bob Kalpin
<b>Office Hours:</b>	Science Resource Center (SC3) M/W 8-8:30AM 1:30-2 PM T/Th 8:15-9:15 AM
<b>e-mail:</b>	<a href="mailto:Kalpinrobert@fhda.edu">Kalpinrobert@fhda.edu</a>

#### Introduction

This course is the study of the endocrine system, lymphatic system, digestive system, metabolism, urinary and reproductive systems, embryological development and classical Mendelian and modern biochemical genetics including genetic engineering.

#### Student Learning Outcomes

- Predict the homeostatic responses of the endocrine system to internal and external changes or stimuli.
- Appraise the role of the lymphatic and immune system in the body's defense to disease.
- Generalize the way in which nutrients are processed to perform various energetic and structural functions in the body.
- Integrate the structure and function of the kidneys in the regulation of fluid, electrolyte, and pH balance.

#### Course Objectives

- A. Examine and describe the location, anatomy, and function of the endocrine glands.
- B. Describe hormone action, hormone classification, and regulation of hormone secretion.
- C. Describe the hypothalamic-pituitary axis and investigate the endocrine organs it regulates.
- D. Examine and describe the gross and microscopic anatomy of the lymphatic system and relate morphology to function.
- E. Investigate and describe the non-specific and specific immune responses.
- F. Examine, compare, and contrast the histologic and gross anatomy of the digestive tract and its accessory organs.
- G. Distinguish the contributions of each of the organs of the digestive system to the processes of digestion and absorption.
- H. Summarize the major metabolic pathways and their interrelations.
- I. Examine and describe the gross and microscopic anatomy of the urinary system.
- J. Investigate and analyze the process of urine formation and its role in the maintenance of homeostasis.
- K. Describe the physiological importance of the main electrolytes and of proper acid/base balance.
- L. Examine and describe the gross and microscopic anatomy of the reproductive system.
- M. Distinguish the role played by each of the organs of the reproductive system in the process of reproduction.
- N. Investigate the hormonal control of reproduction.
- O. Describe the events of human development in-utero and shortly after birth.
- P. Study and predict patterns of inheritance.
- Q. Investigate the molecular basis of genetic disorders.

## **Bio40C Course Information**

### **Prerequisites:**

Biology 40 B with a grade of C or better. Students without prerequisites will not be allowed to enroll. Check with the BHES Division (Kirsch Center 408-864-8773) for pre-requisite information. In addition, you are expected to read and write at the college level, be able to perform basic math, and read graphs and charts. Access to Canvas (<https://deanza.instructure.com/>) is required for submitting some assignments.

### **Attendance:**

One of the most important things you can do for your understanding of the material as well as your grade is to attend class. Not attending class will have a negative impact on your grade! You may not “make-up” a missed class. For any classes missed, you are responsible for any notes, assignments, or reading (hint: make a friend in class). If you miss more than 4 classes during the semester, you may be dropped from the course.

### **Tardiness:**

The class will start on time. If you do come to class late, please be quiet and courteous to those around you. Any handouts missed can be obtained after class.

### **Cell Phones/Pagers:**

Cell phones/pagers must be turned off during class as this is extremely distracting.

### **Quizzes/Exams:**

Quizzes: There will be 6 quizzes given throughout the semester. Quizzes will be worth 10 points each. There are no make-up quizzes however, one quiz score will be dropped. If you come in late, leave early or miss a quiz for any reason – you will receive a zero. Quizzes may be given at the beginning or end of the class.

Exams: Two midterm exams and two lab practical exams worth 100 points each will be given during the semester. A comprehensive final (100 points) will be given during final exam week. Exams will be announced at least one week prior to being given. No exams will be dropped. Make up exams may be considered for legitimate, documented absences only and are all-essay tests (you really don’t want to take one of these!) It will be given within one week of the missed exam. Sleeping late, transportation problems etc. are not legitimate excuses.

### **Lab Reports and Participation:**

Seven lab reports, each worth 6 points, due at the end of each lab. 8 points are earned for presentations during review/ open lab activities. Missed labs cannot be made up for points missed.

### **Important Dates**

Sunday, April 21	Last day to drop without a “W”
Friday, May 31	Last day to drop with a “W”
Monday, June 24	Final Exam 11:30- 1:30

### **Holidays**

Monday, May 27	Memorial Day- No Classes
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## **Bio 40C Exam Policies**

1. Be on time for the exam.
2. Bring all items needed for exam with you (e.g. 2 pencils with erasers, scantron sheet, completed study guide, etc.)
3. All books, backpacks, purses etc. will be placed in the front of the class and picked up after the exam. No items should be under your seat.
4. If space permits, students will alternate seats for exams.
5. Turn cell phones/pagers off during the exam and place in backpacks or purses.
6. You may not leave the exam room for any reason once the exam has started. Use the restroom before the exam. Once you leave the room, I will grade what you have completed up to that point.
7. Once the first person leaves the exam room, no latecomers will be admitted to the exam.
8. **Cheating will result in a zero on the exam and probable expulsion from the class.**
9. Make-up exams are for **emergencies only**. You must notify me the day of the exam to let me know of your situation.
10. Make-up exams are in all-essay form and will be given within one week of the missed exam.
11. Do not schedule appointments etc. during an exam or any class time.

### **Helpful Suggestions:**

The following are suggestions from former students that are great ways to help you improve your chances of getting a good grade:

- Don't get behind in your studying
- Read topic information before and after lecture
- Do study guides as you get them
- Study with a friend or group, quiz each other or "teach" someone else
- Make sure you understand the topic, not just memorize facts
- Attend study sessions

**Exams and Grading:** All assignments are due on the dates specified in the assignment. No late submissions. Missed exams may not be made up without approval *prior to the test date*. Cheating of any sort (including plagiarism) will result in a grade of F without exception. Grading is based on:

- Six lecture quizzes (10 pts. each, lowest score dropped)
- Two midterm exams (100 pts. each)
- Comprehensive final exam (100 pts.)
- Laboratory reports and lab participation ( 50 pts.)
- Two laboratory practical exams (100 pts. each)

Grades for the course are calculated as follows:

Final Exam	100 pts.
Midterm Exams	2@ 100 pts. each
Lecture Quizzes	5@10 pts. each
Lab Practical Exams	2@ 100 pts. each
<u>Lab Reports and Participation</u>	<u>50 pts.</u>
Total	600 pts.

**Letter Grade Percentage**

<u>A+</u>	<u>97%</u>
<u>A</u>	<u>92-96%</u>
<u>A-</u>	<u>89-91%</u>
<u>B+</u>	<u>86-88%</u>
<u>B</u>	<u>82-85%</u>
<u>B-</u>	<u>79-81%</u>
<u>C+</u>	<u>73-78%</u>
<u>C</u>	<u>66-72%</u>
<u>D</u>	<u>55-65%</u>
<u>F</u>	<u>&lt;55%</u>

**Student Attendance Policy**

Students are expected to attend all sessions of each class. Instructors may drop students from the class if they fail to attend the first class meeting, or when accumulated unexcused hours of absences exceed ten percent of the total number of hours the class meets during the semester.

**Drop Policy**

Students are responsible for dropping a class and must fill out the appropriate paperwork by the above deadline to officially drop the course

**Support Services**

DeAnza College makes reasonable accommodations for persons with disabilities. Students should contact DSP&S (Disability Support Programs and Services): <http://deanza.edu/dsps>

**Other Services**

The DeAnza offers a wide variety of support services to help you through your college career. Services such as tutoring, short reading and writing skills classes, financial aid, programs in educational transition and help for disabled students are offered for your benefit:

<http://deanza.edu/studentervices>

<http://deanza.edu/studentuccess>

**FREE TUTORING** is available both in-person and online. Visit the Student Success Center:

<http://deanza.edu/studentuccess>

**Academic Dishonesty**

DeAnza College (and this instructor) has a strict no cheating/ plagiarism policy. Students found cheating or plagiarizing on class examinations, quizzes or homework will receive a grade of zero and be reported to the office of instruction and placed on probation. Students in this course must additionally abide by the rules set out in the student handbook put out by the Biological, Health, and Environmental Sciences Division.

<http://www.deanza.edu/bhes/StudentHandbook.pdf>

## Bio 40C Lecture Schedule

<u>Week</u>	<u>Topic</u>
April 8/10	Endocrinology
April 15/17	Lymphatic and Immune Systems
April 22/24	Review
April 29/ May 1	<b><u>Exam 1 Monday, April 29</u></b>
May 6/18	Digestive System
May 13/15	Metabolism
May 20/22	Urinary System
May 27/29	<b><u>Exam 2 Wednesday, May 29</u></b>
June 3/5	Fluid and Electrolyte Homeostasis
June 10/12	Reproductive System
June 17/19	Development and Inheritance
<b><u>Final Exam Monday, June 24 11:30AM- 1:20PM</u></b>	

## Bio 40C Lab Schedule

<u>Week</u>	<u>Lab Topic</u>
April 8/10	Endocrinology
April 15/17	Lymphatic and Immune Systems
April 22/24	Digestive Anatomy
April 29/ May1	Digestive Physiology
May 6/8	Review
May 13/15	<b><u>Lab Practical Exam 1</u></b>
May 20/22	Urinary System
May 27/29	Reproductive System
June 3/5	Development and Inheritance
June 10/12	Review
June 17/19	<b><u>Lab Practical Exam 2</u></b>

**Final Exam Monday, June 24 11:30AM-1:20PM**