

DeAnza College Biology Department

# **BIOLOGY 40A**

## **Human Anatomy and Physiology**

Instructor: Bob Kalpin

### **COURSE SYLLABUS**

**Fall 2017**

<b>Course:</b>	Biology 40A, section 00271 (#3) and 00272(#4)
<b>Location:</b>	Lecture Room SM34 Lab Room SC2106
<b>Time:</b>	<b>Lecture</b> T/Th 9:30- 11:20 <b>Lab</b> T or Th 11:30-2:20
<b>Text:</b>	Tortora and Derrickson, "Principles of Anatomy and Physiology", (14th Ed.) ISBN: 978-1-118-774564
<b>Lab Manual:</b>	Marieb, Elaine. "Human Anatomy and Physiol. Laboratory" (11th Ed), ISBN 978-0-321-831569.
<b>Instructor:</b>	Bob Kalpin
<b>Office Hours:</b>	Science Resource Center (SC3) Tues/Thurs 8:15-9:15 AM
<b>e-mail:</b>	<a href="mailto:Kalpinrobert@fhda.edu">Kalpinrobert@fhda.edu</a>

### **Introduction**

This course is the first of a three part series of anatomy and physiology classes. Topics include the study of cell chemistry, cell biology, histology and the integumentary, skeletal and muscular systems with emphasis on homeostatic mechanisms.

### **Course Aims and Objectives**

- A.** Investigate and critique the major historical events that have influenced the definition and advancement of current anatomical and physiological specialties and principles.
- B.** Examine and critique the role of the scientific method in the study of anatomy and physiology as it relates to organizing information, evaluating evidence and drawing logical conclusions.
- C.** Examine fundamental anatomical and physiological principles, anatomical terminology, the progression of structural levels of organization, and appraise these as they apply to the homeostasis of human systems.
- D.** Investigate the chemical basis of life with an emphasis on the synthesis, structure and function of organic molecules and evaluate their role in normal human physiological functions, nutrition, and the biochemical basis of disease processes.
- E.** Investigate the cellular basis of life and appraise the clinical and practical applications of cytology as they relate to normal cell functioning, aging, and disease processes.
- F.** Examine the tissue level of organization of humans and interpret the role of tissues in human systems. Compare and contrast the location, organization and function of human tissues.
- G.** Investigate the structure and function of the integumentary system and appraise the significance of the variations in its components to normal functions, immunity, adaptation and maintenance of homeostasis.
- H.** Analyze the composition, structure and functions of skeletal tissue, the axial and appendicular skeleton, and human articulations. Evaluate the correlation of their structure/s to normal function/s and select issues of nutrition, disease, aging, stress, gender, and race.
- I.** Identify the structural and physiological characteristics of various muscle tissues and evaluate these with respect to the muscle action, conditioning, homeostasis and muscle disorders. Contrast the location, organization and function/s of selected skeletal muscle group/s.

### **Student Learning Outcomes**

- Demonstrate the scientific method as employed by health professionals to evaluate real-world problems involving the skin, skeletal, and muscle systems.
- Investigate the roles of molecules, organelles, and cells in the function of skin, skeletal, and muscle tissues.
- Infer the homeostatic reactions of skin, skeletal, and muscle cells and tissues in reaction to external or internal changes in conditions.

## **Bio40A Course Information**

**Prerequisites:** Satisfactory score on the Biology 40A Placement Test or Chemistry 1A or Chemistry 50 or Chemistry 30A with a grade of C or better. 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 <https://catalyst.deanza.edu> 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 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 are given for legitimate 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 will be due, each at the end of the day's lab, each worth 6 points.. 8 points are earned for participation in lab review sessions.

### **Important Dates**

Sunday, October 8      Last day to drop without a “W”

Friday, November 17      Last day to drop with a “W”

Tuesday, December 12      Final Exam 9:15- 11:15 AM

### **Holidays**

Thursday November 23      Thanksgiving Day- No Classes

## **Bio 40A 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 and quizzes 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.

<u>Letter Grade</u>	<u>Percentage</u>
A+	97%
A	92-96%
A-	89-91%
B+	85-88%
B	82-84%
B-	79-81%
C+	71-78%
C	65-70%
D	55-64%
F	<55%

### **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 may be dropped from the course. 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 40A Lecture Schedule

<u>Week</u>	<u>Topic</u>
September 26/28	Introduction and Chemistry
October 3/5	Cell and Tissue Biology
October 10/12	Review
October 17/19	<b><u>Exam 1 Tuesday, October 18</u></b>
October 24/26	Integumentary System
Oct.31/Nov. 2	Bone Tissue
November 7/9	Axial Skeleton
November 14/16	<b><u>Exam 2 Tuesday, November 15</u></b>
November 21	Appendicular Skeleton and Joints
November 28/ 30	Muscular Tissue
December 5/7	Muscular System
<b><u>Final Exam Tuesday, December 12 at 9:15 AM</u></b>	

# Bio 40A Lab Schedule

<u>Week</u>	<u>Lab Topic</u>
September 26/28	Exercise 1: Language of Anatomy
October 3/5	Exercise 4: Cell Anatomy and Division
October 10/12	Exercise 6: Classification of Tissues
October 17/19	Exercise 7: Integumentary System
October 24/26	<b><u>Lab Practical Exam 1</u></b>
Oct. 31/Nov. 2	Exercise 10: Axial Skeleton
November 7/9	Exercise 11: Appendicular Skeleton
November 14/16	Exercise 11
November 21	Exercise 13: Muscular System
November 28/30	Exercise 13
December 5/7	<b><u>Lab Practical Exam 2</u></b>

**Final Exam Tuesday, December 12 at 9:15-11:15 AM**