

DeAnza College Biology Department

BIOLOGY 40B

Human Anatomy and Physiology

Instructor: Bob Kalpin

COURSE SYLLABUS

Winter 2025

Course:	Biology 40B, section 31564 (#7Y) and 37123 (#8Y)
Lecture:	Online through Canvas https://deanza.instructure.com/
Lab:	Room SC2106 Tues. 8:30-11:20 (7Y) or 11:30-2:20 (8Y)
Text:	Tortora and Derrickson, "Principles of Anatomy and Physiology" (16th Ed.) ISBN: 9781119662792
Lab Manual:	Marieb, Elaine. "Human Anatomy and Physiol. Laboratory" (13th Ed), ISBN: 9780134806365
Office Hours:	Science Resource Center (SC3) Tues. 8-8:30 Thurs. 8-9:30 Zoom Office Hours: Wednesday 9-11 AM
e-mail:	kalpinbob@fhda.edu

Introduction

This course is the second of a three-part series of anatomy and physiology classes. Topics include the study of the nervous, circulatory, and respiratory systems with emphasis on homeostatic mechanisms.

Course Aims and Objectives

- A. Compare and contrast the regulatory mechanisms of nervous and endocrine systems.
- B. Examine the microscopic anatomy of nervous tissue.
- C. Categorize the structures of the nervous system into central or peripheral divisions.
- D. Describe, compare, and contrast selected aspects of neurophysiology.
- E. Examine and describe the gross and microscopic anatomy of the spinal cord, spinal ganglia, spinal nerves, and spinal meninges.
- F. Analyze the role of the spinal cord and spinal nerves in information transfer.
- G. Identify and compare the structure and functions of the major brain regions and cranial nerves.
- H. Investigate the formation and circulation of CSF, blood-brain barrier, and cerebral circulation.
- I. Map the functional areas of the cerebral cortex and describe their functions.
- J. Examine and contrast the actions of representative neurotransmitters.
- K. Describe anatomical and physiological aspects of several of the special senses.
- L. Compare and contrast the somatic and autonomic nervous systems and investigate the control of visceral function by the sympathetic and parasympathetic branches of the ANS.
- M. Examine and describe the organization of the cardiovascular system.
- N. Examine and recognize the components and characteristics of blood.
- O. Examine and describe the gross and microscopic anatomy of the heart.
- P. Investigate cardiac physiology; define and discuss cardiac output.
- Q. Examine the morphology of the blood vessels and relate morphology to function; investigate the physics of circulation and the control of blood pressure and blood flow.
- R. Identify and name the principal arteries, veins, and circulatory routes.
- S. Identify, examine and describe the gross and microscopic anatomy of the respiratory tract.
- T. Analyze the physiology and regulation of ventilation and gas exchange.

Student Learning Outcomes

- Demonstrate the ability to apply basic knowledge regarding the structure and function of the respiratory system to predicting its responses in maintaining homeostasis.
- Appraise the role of the cardiovascular system in maintaining homeostasis.
- Apply the structural organization of the nervous system to how it processes information.

Bio40B Course Information

Prerequisites: Biology 40A 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://deanza.instructure.com> required for obtaining course materials and submitting some assignments.

Required for all students: Video camera, computer, and broadband internet. Access to Canvas <https://deanza.instructure.com> is required. Exams and quizzes require video camera access and may occur using video test proctoring.

Attendance:

Lecture: Each day that a student accesses any section of the Bio40B Canvas course is considered a lecture attendance. Students are expected to attend a minimum of twice each week.

Lab: In-person attendance is required in lab each week.

A student who has not attended both lecture and lab once in any two-week period may be dropped from the class.

Quizzes/Exams:

Quizzes: There will be 10 quizzes given throughout the semester. Quizzes will be worth 10 points each. Quizzes may be accessed only during the specified class times. Missed quizzes may not be made-up.

Exams: Two midterm exams and a final exam worth 100 points each will be given during the quarter. Make-up exams may be considered only for midterm exams, for legitimate, documented excuses only, and may be all-essay tests (you really don't want to take one of these!) It will be given within one week of the missed exam. There is no make-up exam allowed for the final exam.

Lab Reports and Participation:

Ten weekly lab activities will each be worth 5 points each and must be completed within the assigned weekly period. A variety of assigned activities may include research assignments, lab worksheets, and contributing to discussions. Missed labs cannot be made up for points missed.

Academic Dishonesty:

De Anza College (and this instructor) has a strict no cheating/ plagiarism policy. Students found cheating, plagiarizing, or sharing answers without instructor permission, on class examinations, quizzes or homework will receive a grade of zero and be reported to the office of instruction.

Read the entire policy here: http://www.deanza.edu/policies/academic_integrity.html

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>)

Important Dates

Sunday, January 19	Last day to drop without a "W"
Friday, Feb. 28	Last day to drop with a "W"
Tuesday, March 25	Final Exam

Holidays

Monday, January 20	MLK Day- No Classes
--------------------	---------------------

Exams and Grading: All assignments are due on the dates specified in the assignment. No late submissions are allowed. 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 zero without exception. Grading is based on:

- Ten weekly quizzes (10 pts. each)
- Two midterm exams (100 pts. each)
- Comprehensive final exam (100 pts.)
- Ten laboratory reports (and lab participation) (5 pts. each)

Total points possible= 450

Grades for the course are calculated as follows:

Letter Grade	Percentage
A+	97%
A	92-96%
A-	89-91%
B+	86-88%
B	82-85%
B-	79-81%
C+	73-78%
C	66-72%
D	55-65%
F	<55%

Copyright Rules

Students are prohibited from reproducing or sharing any component of this course that is provided by the instructor, including quiz/exam/lab questions or answers, notes, slides, or other files.

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. The instructor has the right to drop students who fail to attend in any two week period.

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/student-services>

<http://deanza.edu/student-success>

Free Tutoring is available both in-person by video conference or through Net Tutor.

Visit the Student Success Center: <http://deanza.edu/student-success>

For Help With Canvas, Zoom, etc. visit the De Anza Online Education Center

<https://www.deanza.edu/online-ed/>

Bio 40B Schedule

<u>Week</u>	<u>Topic</u>
1- January 6	Nervous Tissue
2- January 13	Spinal Cord and Spinal Nerves, Brain
3- January 20	Brain and Cranial Nerves, Autonomic NS
4- January 27	<u>Exam 1 Tuesday, January 28</u>
5- February 3	Sensory, Motor, and Integrative Systems
6- February 10	Special Senses
7- February 17	Cardiovascular System: Blood
8- February 24	<u>Exam 2 Tuesday, February 25</u>
9- March 3	Cardiovascular System: The Heart
10- March 10	Cardiovascular System: Blood Vessels
11- March 17	Respiratory System
	<u>Final Exam Tuesday, March 25</u>

Bio 40B 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, 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 possibly 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 unique, individualized assessments 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
- Make a list of questions, then get them answered
- Attend office hours