

DeAnza College Biology Department

BIOLOGY 40C

Human Anatomy and Physiology

Instructor: Bob Kalpin

COURSE SYLLABUS

Spring 2025

Course:	Biology 40C, section 46070 (#1Y) and 41771 (#2Y)
Lecture:	Online through Canvas https://deanza.instructure.com/
Lab:	Room SC2106 Tuesday 8:30-11:20 (1Y) or 11:30-2:20 (2Y)
Text:	Tortora and Derrickson, "Principles of Anatomy and Physiology" (15th Ed.) ISBN: 9781119437130
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 study of the endocrine system, lymphatic system, digestive system, metabolism, urinary and reproductive systems, embryological development and classical Mendelian and modern biochemical genetics.

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.

Summarize and describe the process of nutrient ingestion, digestion, and absorption of nutrients. Trace the fate of absorbed nutrients and describe their metabolic pathways.

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.

Bio40B Course Information

Prerequisites: Biology 40B 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 may require video camera access and may occur using Zoom 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 at least 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, April 20	Last day to drop without a "W"
Friday, May 30	Last day to drop with a "W"
Tuesday, June 24	Final Exam

Holidays

Monday, May 26	Memorial Day- No Classes
Thursday, June 19	Juneteenth Holiday- 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 40C Lecture Schedule

<u>Week</u>	<u>Topic</u>
1	Endocrinology
2	Endocrinology/Lymphatic and Immune Systems
3	Lymphatic and Immune Systems
4	Digestive System
<u>Exam 1 Tuesday, April 29</u>	
5	Digestive System
6	Metabolism
7	Urinary System
8	Fluid and Electrolyte Homeostasis
<u>Exam 2 Tuesday, June 3</u>	
9	Reproductive System
10	Reproductive System
11	Development and Inheritance
<u>Final Exam Tuesday, June 24</u>	

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, 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