



CHELMSFORD HIGH SCHOOL

ANATOMY & PHYSIOLOGY H SYLLABUS

2023-2024

COURSE DESCRIPTION

ANATOMY AND PHYSIOLOGY—H



10 Credits (#23013), Grade 11 + 12, Lab-based

This biology elective is an academically rigorous course that is designed to provide a background for those students anticipating study in medical or health fields in the future, or for students with an interest in how the human body functions. Topics include: anatomical terminology, histology, and an examination of the structure, function and disease of body systems. The text is written at a college reading level and many college level lab activities are conducted. The lab activities require motivated and independent students. All students are required to be active participants in a cat dissection for this course. Students will learn how to use a stethoscope, blood pressure cuff, spirometer, and other equipment in the lab. Homework will average around one hour per night.

Prerequisite: Successful completion of Honors Biology, advanced performance in CP Biology recommended

REQUIRED TEXTS

Human Anatomy & Physiology (Eleventh Edition, 2018) by Elaine Marieb and Katja Hoehn

COURSE GOALS and STUDENT LEARNING OUTCOMES:

By the end of the course, students will be able to...

1. Use anatomical terminology.
2. Use a compound light microscope to identify the 23 tissues found in the human body. Also be able to state their main location(s) and function(s).
3. Identify the main structures and organs of the body in a detailed cat dissection.
4. Describe the main structures and functions of the 11 different organ systems in humans.
5. Name and describe several different diseases and pathologies related to each organ system.

COURSE STANDARDS

[DESE STANDARDS LINK](#)

PERSONS WITH DISABILITIES

Chelmsford High School is committed to supporting the success and well-being of all students, regardless of varying abilities and levels of adaptive skills. The Special Education office provides services and resources to empower each student to attain their highest level of academic success and learning independence.

ACADEMIC INTEGRITY

At Chelmsford High School, students are expected to maintain high moral and ethical standards, as exemplified by the final sentence of our mission statement: *"A spirit of respect is fostered, as members take*

responsibility for their actions and acknowledge the rights and differences of others.” (CHS Mission Statement)

Students should respect themselves, other students, staff members and the school. The acts of cheating and plagiarism violate expectations that students will exhibit respectful, ethical behavior.

[The Academic Honor Code](#) exists to address the issues of cheating and plagiarism.

GRADING POLICIES

Please connect with individual teachers for specific information regarding grading. Students will be able to monitor academic progress biweekly through X2/ASPEN.

Students are strongly encouraged to take advantage of the academic support programs and services (such as PRIDE Block, after-school help, etc.) available to them to help ensure and support success. Information about these services can be provided by your teacher, guidance counselor, or administration.

- ❖ Grading is calculated based on total points earned for assignments during the term. Exams are each worth 100 points, homework is usually 10 points, and labs vary around 30-100 points (depending on complexity).
- ❖ Typically, this results in around 50% of the A&P grade coming from exams, 40% from lab/classwork, and 10% from homework.

COURSE SKILLS

[Science and Engineering Practices in the Next Generation Science Standards](#)

COURSE OUTLINE

A&P is divided into 11 units:

1. Introduction & Anatomical Terminology
2. Biology Review
3. Histology
4. Integumentary System
5. Skeletal System
6. Nervous System
7. Muscular System
8. Cardiovascular System
9. Respiratory System
10. Digestive System
11. Urinary System

This syllabus and course outline are subject to change as Chelmsford High School seeks to continually improve the learning experiences for all students.

“We foster PRIDE* in our pursuit of excellence.”

PRIDE refers to our five core values – Perseverance, Respect, Integrity, Dedication, and Empathy. These five pillars represent our points of emphasis in supporting the development of quality students and quality citizens.