

Course Syllabus: Anatomy and Physiology

Course Description

Anatomy and Physiology integrates the study of the structures and functions of the human body. However, rather than focusing on distinct anatomical and physiological systems (respiratory, nervous, etc.) instruction is focused on the essential requirements for life. Areas of study include organization of the body; protection, support and movement; providing internal coordination and regulation; processing and transporting; and reproduction, growth and development. Chemistry is integrated throughout the course. Whenever possible, careers related to medicine, research, health-care and modern medical technology is emphasized throughout the curriculum. Case studies concerning diseases, disorders and ailments (i.e. real-life applications) are used throughout the course.

This course has three sections: Anatomy and Physiology A and is the first half of the course and includes Modules 1-3. Anatomy and Physiology B is the second half of the course and includes Modules 4-6. Anatomy and Physiology Y is the entire course and includes Modules 1-6.

This course includes the following modules:

- Module 1 Protection and Support
- Module 2 Movement
- Module 3 Communication and Coordination
- Module 4 Transport
- Module 5 Respiration and Digestion
- Module 6 Regulation and Reproduction

<u>Textbook</u>

There is no required textbook for this course. All content is digital and available in the online course modules.

Course Participation Policy

Students should follow the Course Schedule (located in Course Information area of course) and all course work must be submitted no later than 11:59 PM on the due date.

After the due date has passed, instructors will enter zeros in the Grade Center for work not submitted by the deadline. During student breaks and towards the end of the semester, students may have the opportunity to improve their course grade by completing and submitting work with grades of zero from earlier in the semester. Zeros will remain in the Grade Center until course work is submitted and evaluated by the instructor.

The CVA term ends prior to the end of the traditional school semester. The final date work will be accepted each term is posted on the CVA website (cobbvirtualacademy.org).

Grading

Grades for the course are calculated based on category percentages as follows:

Assignments	= 20%
Experiments	= 25 %
Quizzes	= 15 %
Tests	= 30 %
Final Exam	= 10%

Academic Integrity

Academic integrity is the cornerstone of learning at CVA and we take the integrity and authenticity of student work very seriously. When academic integrity is maintained, students will make decisions based on values that will prepare them to be productive, meaningful, and ethical citizens.

Students are required to abide by the CVA Academic Integrity Policy. Academic dishonesty in any form will not be tolerated. The CVA Academic Integrity Policy outlines the consequences if students fail to maintain academic integrity in their course. For additional information, the CVA Academic Integrity Policy is posted on the CVA website.

Additional General Information

- Students must complete the mandatory online CVA Student Orientation each term before any course work will be graded by the instructor. Only one Student Orientation is completed each term.
- All course work must be submitted through Blackboard in the format requested. Students should have access to Microsoft Office and submit assignments in that format. All CCSD students have access to the Office 365 Suite. Assignments submitted through email will not be accepted.
- The 'Grade before Final Exam/EOC' column in the student Grade Center shows the current grade for the course and is automatically calculated.
- Students in all sections of this course will take an online final exam during the times indicated on the CVA website.

Prerequisites

While there are no prerequisite courses, to support student success it is recommended that students have knowledge of the following topics:

- Biomolecules (understanding structure and function of Carbohydrates, Proteins, Lipids, and Nucleic Acids)
- pH (how pH affects blood chemistry and enzyme activity)
- Cellular respiration and its role in the production of ATP (Catabolic versus Anabolic reactions); Enzymes (the role of enzymes as catalysts)
- Cellular structure and function (also emphasize the fluid mosaic model of the cell membrane and the movement of ions (sodium-potassium pump)
- Mitosis and Meiosis

- Structure of DNA and transcription and translation (one gene, one protein)
- Electricity and charges, Forces
- Chemical processes of the body (ion movement across membranes, pH and electrolyte balance).

Teacher and Student Expectations

Teacher

- Welcome Phone Call in the first two weeks of class.
- 24 48 hour turnaround on all communication
- Provide relevant feedback on assignments
- Be accessible via email and phone or text during published hours

Student

- Login to the course daily and review the announcements
- Have consistent access to a computer and internet
- Read and respond to instructor communication
- Contact the instructor with questions
- Plan your time wisely