

# CVA Biology



**COBB VIRTUAL ACADEMY**  
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## Class Description

Biology students start by developing an understanding of the cellular structure and the role these structures play in living cells. The students develop a fundamental understanding of the role of bio-macromolecules, their structure and function as related to life processes. The students then analyze how genetic information is passed to their offspring and how these mechanisms lead to variability and hence diversity of species.

This course has two sections. Biology B is the second half of the course and includes Units 4–6. Biology Y is the entire course and covers Units 1-6

Click [HERE](#) Class Schedule which outlines the Units, Lessons, and Assessments for this course.

Click [HERE](#) for the State standards.

## Class Outline

### Unit 1: Foundations of Biology

This unit introduces students to biology as the study of life. Biologists study living organisms, including humans, and their interactions with each other and their surroundings. This includes investigations regarding health: the health of human beings, animals and other organisms, and entire ecosystems.

### Unit 2: Life's Origins

In this unit, students examine the essential role of water in biological systems, including its properties and how it supports cellular functions. They explore cell structure, identifying key organelles and their functions within eukaryotic and prokaryotic cells. The unit also covers cell energy, focusing on how cells convert nutrients into energy through processes such as cellular respiration and photosynthesis.

### Unit 3: Cell Reproduction

In this unit, students study the mechanisms of cell reproduction, including both mitosis and meiosis, and their roles in growth, development, and genetic diversity. They explore the stages of the cell cycle, including interphase and the various phases of mitosis, as well as the processes of meiosis that result in gamete formation. The unit emphasizes the importance of these processes for maintaining genetic continuity and introducing genetic variation in organisms.

### Unit 4: Earth's Diversity

In this unit, students explore the biosphere, the global sum of all ecosystems, and understand how various ecosystems interact within it. They study different types of ecosystems, their components, and the flow of energy and nutrients within them, emphasizing the importance of biodiversity. The unit also covers ecological recycling processes, such as nutrient cycling and decomposition, and their critical roles in maintaining ecosystem stability and sustainability.

### Unit 5: Scientific Connections

In this unit, students study the theory of evolution which describes the processes that transformed life on Earth leading to today's diversity.

### Unit 6: Classification and Diversity

In this unit, students learn about the classification of living organisms, focusing on the major kingdoms: Bacteria, Protists, Fungi, Plants, and Animals. They explore the distinguishing characteristics and ecological roles of each group.

## CVA Work Policy

- All classwork must be completed and submitted using the links in CTLS by the DUE DATE listed on the Class Schedule.
- Work should be completed in the order it is assigned on the Class Schedule.
- All work submitted on time will be graded within 48 hours.
- Assignments not submitted by the due date will be marked missing. Missing assignments are calculated as zeros in the coursework average. When students submit missing work, the assignment will be graded and calculated into the coursework average.

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](http://cobbvirtualacademy.org) (cobbvirtualacademy.org) and the Class Schedule.

## Grading

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

Category	Weight
Assignments	20%
Experiments	25%
Quizzes	15%
Tests	30%
EOC	10%

## CVA End of Term Exemption Incentive

To qualify for CVA's exemption incentive and exempt the lowest unit test or major assessment grade, CVA students must:

- Submit ALL assignments on OR before the due date
- Have an 85% coursework average or higher before the final exam
- Have no more than one academic integrity violation

## 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](#).

Consequence	Occurrence			
	1st	2nd	3rd	4th
Parent contact by teacher	✓	✓	✓	✓
Resubmit work for full credit	✓			
Resubmit work for half credit		✓		
Automatic Zero			✓	✓
Parent contact by CVA Administration			✓	✓
Mandated proctored exam or course work				✓
Local school is notified of Academic Integrity violation		✓	✓	✓
Other as designated by CVA or local school administration	✓	✓	✓	✓

## General Information

- The Cobb Teaching and Learning System (CTLS) is the platform used to deliver Cobb Virtual Academy classes.
- Students must earn 100% on the Student Orientation Quiz located inside each CVA Digital Classroom before they begin their Student Coursework.
- All coursework must be submitted through CTLS.
- All CCSD students have access to Microsoft 365 applications and must submit assignments in the requested format.
- Students in all sections of this course will take an online final exam during the window of time published on the CVA website and the Class Schedule.

## Course Specific Information

There is no required textbook for this course. All content is digital and available in the online course. Students will take the Georgia Milestones End of Course Assessment in Biology at the conclusion of the course. The Biology EOC Assessment Guide is located [HERE](#).

## Technology Requirements



CTLS is geo-restricted to the United States.

- A modern PC or Mac Computer
  - Lightweight or mobile devices such as Chromebooks, iPads, Android tablets, or smartphones **may not** be compatible with many of our courses.
  - Windows or Mac based computer
- Access to Microsoft 365
- Internet access

## CVA Expectations

### Student

- Maintain consistent access to a computer and internet
- Login to the course daily and review the announcements
- Adhere to the deadlines listed on the Class Schedule
- Read and promptly respond to teacher communication
- Contact the teacher with questions
- Manage your time wisely

### Teacher

- Welcome Phone Call in the first two weeks
- 24 – 48-hour turnaround on all communication
- 24 – 48-hour turnaround on grading for items submitted by the due date
- Provide relevant feedback on assignments
- Be accessible via email and phone or text during published hours
- Provide two or more live sessions per term

## Remind

CVA students and parents are automatically enrolled in their CVA teacher's Remind class based on the phone numbers provided during registration. If a parent and student provide the same cell phone number, they will not sync to Remind and will have to join the class manually using the join code posted on the Teacher Information page of their course.

## Student Support

A student's first source for support is their CVA teacher. However, additional support is available. The **CVA Learning Center** is staffed with facilitators and is available both **in person** and **virtually**.

Facilitators can assist students with getting started, class navigation, assignment instructions, submitting work, technical issues, and strategies for online success.

The in-person Learning Center is on the Cobb Horizon High School campus at 1765 The Exchange Atlanta, GA.



All CVA students are enrolled in the Student Support digital classroom which provides access to the Virtual Learning Center (VLC). Students use the CTLS chat feature to send a message to the Student Support Team during the hours it is open.

## Live Sessions

Your teacher will post live session information to the Class Board.

