

# CVA Environmental Science



**COBB VIRTUAL ACADEMY**  
Class. Virtually. Anywhere.

## Class Description

This course integrates the study of many components of our environment, including the human impact on our planet. Instruction should focus on student data collection and analysis. Some concepts are global; in those cases, interpretation of global data sets from scientific sources is strongly recommended. It would be appropriate to utilize resources on the Internet for global data sets and interactive models. Chemistry, physics, mathematical, and technological concepts should be integrated throughout the course.

This course has three sections: Environmental Science A is the first half of the course and includes Units 1 – 3. Environmental Science B is the second half of the course and includes Units 4 – 6. Environmental Science Y is the entire course and includes 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: Introduction to Environmental Science**

In this unit, students will learn about what the study of environmental science encompasses, the process scientists use to study it, and the current issues impacting the Earth's environment.

### **Unit 2: Ecology**

This unit explores the organization of life, from cells to ecosystems, and the rich diversity of organisms through taxonomy and phylogenetics. Students will study evolutionary principles like natural selection and adaptation to understand species changes over time. The unit also covers energy cycling in ecosystems, including food webs and the roles of producers, consumers, and decomposers. This integrated approach provides a clear view of how life is structured, evolves, and sustains itself.

### **Unit 3: Biomes**

This unit examines major biomes, including forests, deserts, and grasslands, focusing on their unique climates, plant and animal life, and adaptations. Students will learn about ecosystem interactions and the global distribution of life, as well as how environmental changes affect these vital habitats.

### **Unit 4: Populations and Biodiversity**

This unit explores how human activities, like urbanization and agriculture, impact biodiversity. Students will learn about the effects on ecosystems and strategies for sustainable development and conservation to balance human needs with environmental preservation.

### **Unit 5: Water, Air, and Land Pollution**

This unit examines the sources, effects, and solutions for water, air, and land pollution. Students will explore how pollutants enter and affect these environments, including impacts on ecosystems and

human health. The unit covers key pollution types, such as chemical runoff and smog, and discusses mitigation strategies and policies for reducing pollution and promoting sustainability.

### **Unit 6: Population Impact, Energy, and Waste**

This unit investigates how energy consumption, waste generation, and population growth interact and affect the environment. Students will explore various energy sources, their environmental impacts, and the challenges of managing waste. The unit also examines how rising populations exacerbate these issues and discusses strategies for sustainable energy use, waste reduction, and managing population impacts to promote environmental health and resilience.

## **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](#) (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%
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](#).





## Academic Integrity Process

Consequences	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			✓	✓
Notification by CVA administration to local school			✓	✓
Mandated proctored exam or coursework				✓
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.



## 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-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

## CTLS Parent Account

Cobb Virtual Academy teachers use CTLS Parent to communicate with students and parents. Students will automatically receive communication sent from CTLS Parent via their CCSD student email address and will be asked to provide a cell phone number to receive text communications. Directions for students to set up CTLS Parent are located in the CVA Orientation. Parents will receive communications according to their existing notification settings.

## 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.

