

CVA Astronomy



COBB VIRTUAL ACADEMY
Class. Virtually. Anywhere.

Class Description

This course will provide the student with an introduction to the concepts of modern astronomy, the origin and history of the Universe, and the formation of the Earth and the solar system. Students will compare the Earth's properties with those of the other planets and explore how the heavens have influenced human thought and action. The course gives a description of astronomical phenomena using the laws of physics. The course treats many standard topics including planets, stars, the Milky Way and other galaxies, and black holes. Laboratory exercises include experiments in light properties, measurement of radiation from celestial sources, and observations at local observatories and/or planetariums

This course has three sections: CVA Astronomy A is the first half of the class and includes Units 1-5. CVA Astronomy B is the second half of the class and includes Units 6-9. CVA Astronomy Y is the entire class and includes Units 1-9.

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

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

Class Outline

Unit 1: Light and Telescopes

In this unit, students will investigate the nature of light and how astronomers use different parts of the electromagnetic spectrum to investigate the Universe. Students will be introduced to telescopes and how they work.

Unit 2: Sky Observations and Measurements

In this unit, students will learn about how to recognize what they see in the sky, natural phenomena like eclipses, and why we have seasons.

Unit 3: Astronomy History and Motion

In this unit, students will learn about the evolution of the study of astronomy through history.

Unit 4: Terrestrial Planets and the Moon

In this unit, students will learn about the first four planets of our solar system and our moon. Mercury, Venus, Earth, and Mars are the planets closest to the sun.

Unit 5: Gas Giants, Frozen Worlds, and the Outer Solar System

What is beyond the orbit of Mars? In this unit students will explore the objects and regions beyond Mars to the edge of our solar system.

Unit 6: The Sun, Other Stars, and Stellar Evolution

The sun is the source for all energy on the earth. In this unit, students will learn how the sun makes its energy and what will happen when the sun gets to the end of its life cycle. Students will learn the classification of other types of stars in the universe and their life cycles.

Unit 7: Galaxies and the Universe

In this unit, students will learn about how galaxies are formed, the evolution of galaxies and how they are classified. Students will look at cosmology, the science of the origin and development of the universe.

Unit 8: Life Elsewhere

Is Earth the only place where life exists? Is there life elsewhere and if so, what kind of life? In this unit, students will explore the possibilities.

Unit 9: Global Change

In this unit, students will learn about the beginnings of space exploration and the progress of the space program.

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%
Final Exam	10%

CVA Exemption Incentive

To qualify for CVA's exemption incentive and exempt the Final Exam/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 (CTLIS) 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 CTLIS.
- 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 – 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.

