

# CVA AP Statistics Syllabus



**COBB VIRTUAL ACADEMY**  
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## Class Description

AP Stats offers a combination of assessment and instruction in an online environment containing but not limited to the areas of exploring data, sampling and experimentation by planning and conducting studies, anticipating patterns using probability and simulation, and using statistical inference to analyze data and draw conclusions.

The purpose of this course is to provide students with a deep understanding of the concepts of statistics to prepare them for the AP Statistics Exam and for future higher education statistics courses.

This course has three sections: AP Stats A is the first half of the class and includes Units 1-4. AP Stats B is the second half of the class and includes Units 5-8. AP Stats Y is the entire class and includes Units 1-8.

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

Click [HERE](#) for the AP Stats Course and Exam Description.

## Class Outline

### Unit 1: Exploring Data

Students will be introduced to how statisticians approach variation and practice representing data, describing distributions of data, and drawing conclusions based on a theoretical distribution.

### Unit 2: Exploring Relationships

Students will build on what they have learned by representing two-variable data, comparing distributions, describing relationships between variables, and using models to make predictions.

### Unit 3: Collecting Data

Students will be introduced to study design, including the importance of randomization. Students will understand how to interpret the results of well-designed studies to draw appropriate conclusions and generalizations.

## **Unit 4: Probability and Random Variables**

Students will learn the fundamentals of probability and be introduced to the probability distributions that are the basis for statistical inference.

## **Unit 5: Sampling Distributions and Confidence Intervals**

As students build understanding of sampling distributions, they will lay the foundation for estimating characteristics of a population and quantifying confidence.

## **Unit 6: Proportions**

Students learn inference procedures for proportions of a categorical variable, building a foundation of understanding of statistical inference, a concept they will continue to explore throughout the course.

## **Unit 7: Means and Slope**

Students will learn to analyze quantitative data to make inferences about population means. Students will also understand that the slope of a regression model is not necessarily the true slope but is based on a single sample from a sampling distribution, and they will learn how to construct confidence intervals and perform significance tests for this slope.

## **Unit 8: Chi-Square**

Students will learn about chi-square tests, which can be used when there are two or more categorical variables.

## **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%
Quizzes/Projects	30%
Tests	40%
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

Students taking AP Statistics have the option to sit for the AP Exam in the spring. This exam provides an opportunity to earn college credit and showcase their mastery of Statistics. The exam assesses student understanding of the skills and learning objectives outlined in the course framework. The exam is 3 hours long and includes 40 multiple-choice questions and 6 free-response questions. Preparing for and succeeding on this exam can offer a significant academic advantage and highlight students' readiness for college-level coursework. Students will contact their local school for additional testing information.



## 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.

