

# **Class Syllabus: Honors Advanced Algebra**

### **Course Description**

Advanced Algebra is the third course in a sequence of courses designed to ensure career and college readiness. It is intended to prepare students for fourth mathematics course options relevant to their postsecondary pursuits. In Advanced Algebra, students will continue to enhance their data and statistical reasoning skills as they learn specific ways to collect, critique, analyze, and interpret data. Students will learn how to use matrices and linear programming to represent data and to solve contextually relevant problems. Students will strengthen their geometric and spatial reasoning skills as they learn how to solve trigonometric equations using the unit circle. In previous courses, students studied how to use linear and quadratic functions to model real-life phenomena. In Advanced Algebra, students will further develop their functional and graphical reasoning as they explore and analyze structures and patterns for exponential, logarithmic, radical, polynomial, and rational expressions, equations, and functions to further understand the world around them.

The honors course is more challenging than the standard course and provides multiple opportunities for students to take greater responsibility for their learning. Honors Advanced Algebra builds on algebra knowledge while also preparing you for future math courses. It teaches you to think logically, problem solve, and use critical thinking skills in real life situations.

This course has three sections: Honors Advanced Algebra A is the first half of the course and includes Units 1-3. Honors Advanced Algebra B is the second half of the course and includes Units 4-7. Honors Advanced Algebra Y is the entire course and includes Units 1-7.

This course includes the following Units:

- Unit 1 Descriptive and Inferential Statistics
- Unit 2 Exponential and Logarithmic Functions
- Unit 3 Investigating Radical Functions
- Unit 4 Modeling Polynomial Functions
- Unit 5 Investigating Linear Algebra and Matrices
- Unit 6 Trigonometry and the Unit Circle
- Unit 7 Exploring Rational Functions

### **CVA Work Policy**

- All coursework must be completed and submitted using the links in CTLS by 11:59 PM on the DUE DATE.
- Work should be completed in the order it is assigned on the Class Schedule.
- All work submitted on time will be graded within 24-48 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 course 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 listed on the class schedule.

March 21, 2024 1 of 2

## **Grading**

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

Categories	Weights
Assessments	25%
Application Activities	25%
Tests	40%
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 earn 100% on the Student Orientation Quiz located inside each CVA Digital Classroom before they begin their Student Coursework.
- All course work must be submitted through CTLS in the format requested. Students should have access to
  Microsoft 365 and submit assignments in that format. All CCSD students have access to the Microsoft 365 Suite.
- Students in all sections of this course will take an online final exam during the times indicated on the CVA
  website and listed on the class schedule.

## **Course Specific Information**

- Assessments and Application Activities: After reviewing each lesson, students will complete an assessment
  and/or an application activity online. Each assessment has approximately 10 questions. The application activity
  has free-response questions.
- **Tests:** Students should carefully review the feedback on graded items and be sure to understand the material prior to beginning the Unit Test.

March 21, 2024 2 of 2