

# Algebra 2, Part 2 (ALG-057-300-007)

## Mathematics Algebra 2 Part 2 Syllabus

### Course Description

Algebra 2 part 2 covers four major concepts of upper algebra skills including piecewise functions, systems and advanced equations, statistics, and trigonometry. Along with learning these four pieces of knowledge, the course will also have you develop 21st Century Skills in reasoning as well as the attribute of resilience.

### Prerequisites

There are no prerequisites for this class, but it is recommended to have taken Algebra 1 part 1 and 2, as well as Algebra 2 part 1.

### Canvas Information

If you're new to online courses, or if you just need a quick refresher, be sure to take a look at these video tutorials!

### Course Materials

There are no textbooks required for this course, all content can be found within the course lesson pages.

Students may use a handheld graphing or scientific calculator or a Desmos online calculator (found at [desmos.com/scientific](https://desmos.com/scientific) or [desmos.com/calculator](https://desmos.com/calculator) only) during the final exam; no other calculator is allowed.

### Course Learning Outcomes

By the end of this course, you will be able to:

- Identify function types by both graphs and equations, and determine the function types that create piecewise functions.
- Solve systems of equations through graphing and algebraic methods.

- Evaluate and Analyze data using statistical calculations.
- Solve complex problems through the use of trigonometric functions and formulas.

## Grading and Assignments

Your grade in this course will be based on these assignments and exams.

Assignment or Exam	Grading	Percent of Total Grade
Topic Assignments	Computer Graded	20%
Application Problems and Project	Teacher Graded	15%
Module Quizzes	Computer Graded	35%
Content Guides	Teacher Graded	10%
Mid-Course Quiz and Final Exam	Computer Graded	20%

\*You must pass the final exam to earn credit for the course. You may retake the final exam once for a fee.

### Topic Assignments

Each module consists of 4 topics. Each topic has one Topic Assignment where you will be asked to demonstrate your knowledge of the content learned from the lesson material. In total there are 56 Topic Assignments in the course.

### Application Problems and Final Project

At the end of Module 1 you will be introduced to the course project. At the end of each module you will have application problems that build toward the completion of a project. There are three different projects that you will complete through the course, one for each unit. There are instructions, templates, and a rubric provided to help you be successful in completing this portion of the course. The 21st Century Skill of Reasoning is taught through the completion of these projects as well. Be sure to

integrate the practices shared in the instructions and feedback to ensure that you earn the optional micro-credential at the end of the course.

### **Module Quizzes**

At the end of each module you will take a quiz that covers all four topics taught. While module quizzes can not be resubmitted for a fee, they will allow for two attempts on each question, and do not generate additional questions.

### **Exams**

You will complete these exams during the course.

**Mid-Course Quiz:** The mid-course quiz is found in Module 8 and covers all of the material learned in Modules 1-7. The mid-course quiz can not be resubmitted for a fee, but like module quizzes, they allow for two attempts on each question.

**Final Exam:** The final exam is a comprehensive final that covers all material learned in the course from Module 1 through Module 15.

You must pass the final exam to earn credit for the course; you may retake it once, for a fee, upon request.

### **Final Grade**

Your grade in this course will be based on these assignments and exams. Your letter grade will be calculated according to these percentages.

<b>Percent to Letter Grade Calculation</b>	
<b>A</b>	100% – 93%
<b>A-</b>	92% – 90%

<b>B+</b>	89% – 87%
<b>B</b>	86% – 83%
<b>B-</b>	82% – 80%
<b>C+</b>	79% – 77%
<b>C</b>	76% – 73%
<b>C-</b>	72% – 70%
<b>D+</b>	69% – 67%
<b>D</b>	66% – 63%
<b>D-</b>	62% – 60%
<b>F (fail)</b>	59% – 0%