

Algebra 2, Part 1 (ALG-055-300-014)

Syllabus

Course Overview

Algebra 2 part 1 covers three major concepts of upper algebra skills including polynomials, functions, and exponential equations. Along with learning these three pieces of knowledge, the course will also have you develop 21st Century Skills in Idea Design and Refinement as well as the attribute of courage.

Prerequisites

There are no prerequisites for this class. However, we recommend that you take the classes that come before this course:

- Algebra 1 Part 1
- Algebra 1 Part 2

Course Learning Outcomes

Algebra 2, Part 1 is designed to deepen your understanding of solving advanced equations as well as learn to identify key features and graph many functions. The course has been divided into three major sections so by the end of the course diligent students will be able to master the following skills.

- Polynomials: operate, factor, and solve equations using polynomials
- Key Features of Functions: solve and graph polynomial functions, rational functions and absolute value functions
- Radical, Exponential and Log Functions: solve and graph radical functions, exponential functions, and logarithm functions

Course Materials

All the materials you need are included in the course. You do not have to buy any additional textbooks.

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

Assignments

This course is divided into 16 modules with modules 5, 10, and 15 as review and exam modules. Each learning module is split into 4 topics and a review and quiz.

Topic Assignments

There are 48 Topic Assignments, one for each learning topic. These Topic Assignments consist of between 5 and 15 questions that are completed via Derivita, which is embedded in Canvas. You will not need to go to any other website to complete assignments.

Practice Quizzes

At the end of each learning module there will be a practice quiz to help prepare you for the module quiz. These quizzes are not graded, and do not impact your overall course grade.

Module Quizzes

In addition to practicing quizzes at the end of each module, there will also be a graded quiz. While module quizzes cannot be resubmitted for a fee, they will allow for two attempts on each question. If you miss the first problem in a question you will have only 1 more attempt at a second similar problem. You can use your content guide as reference. These quizzes are graded and are calculated into your overall course grade.

Projects and Presentation

Projects: You will be working on your project at the end of each module through the completion of application problems. Each project is divided into 3 parts, which you will submit before the unit exam.

Final Project Presentation: Your final assessment will be to present all 3 of your projects and what you did to refine your project after getting feedback from your teacher. This will require a presentation of material where you will need to video yourself initially and provide ID.

Content Guides

You will be asked to complete content guides as you work through the course. These guides will help prepare you for the assessments by creating notes of the essential material provided in the lessons. These guides can be used on your module quizzes and exams.

Content guide templates are provided in every learning module and are to be submitted before each unit exam. Modules 1-4 content guides are submitted in Module 5. Modules 6-9 content guides are submitted in Module 10. Modules 11-14 content guides are submitted in Module 15.

Exams

You will complete 3 unproctored unit exams for this course and one comprehensive, proctored final exam. The mid-course quiz can **not** be resubmitted for a fee, but like module quizzes, they allow for two attempts on each question.

You must pass the final exam to earn credit for the course.

Grading

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

Assignment and Assessment Chart		
Assignment or Exam	Grading	Percent of Total Grade
48 Topic Assignments	Computer	20%
12 Module Quizzes	Computer	35%
12 Content guides (submitted by Unit)	Teacher	10%
3 Project Proposals 3 Unit Projects Final Project Presentation	Teacher	15%
3 Unit Exams 1 Final Exam*	Computer	20%

* You must pass the final exam with at least a 60% to earn credit for the course.

Grade Scale

Your letter grade is calculated according to these percentages.

Grade	Scale
A	100-93%
A-	92-90%
B+	89-87%
B	86-83%
B-	82-80%
C+	79-77%
C	76-73%
C-	72-70%
D+	69-67%
D	66-63%
D-	62-60%
F (fail)	59%-0