

**Prerequisite courses:** none

**Grade level:** 9-12

## Course Description

Basic Algebra II builds upon the foundational concepts of algebra, focusing on more advanced techniques and applications. The course begins by reinforcing algebraic expressions, including writing, evaluating, simplifying, and factoring. Students then delve into solving linear equations and inequalities, progressing from one-step and two-step equations to those requiring combining like terms and using the distributive property. The curriculum introduces systems of linear equations, exploring different methods for solving them (graphically, by guess and check, substitution, and elimination) and interpreting the number of solutions. Finally, the course explores functions, focusing on identifying linear versus nonlinear functions, interpreting rate of change and slope, and working with slope-intercept form.

This course is part of the Exceptional Students Course Suite, designed for high school students working three or more grade levels behind. The Exceptional Students courses are ideal for students whose IEPs allow them to earn credit for below-grade-level coursework. This particular course, because it addresses content and skills from elementary grades, is also appropriate for middle school students who are behind.

## Course Objectives

Students will meet the following goals in this course.

- Evaluate numerical and algebraic expressions to represent real-world situations.
- Use the distributive property to expand and simplify algebraic expressions, and recognize when two expressions are equivalent.
- Interpret one- and two-step linear equations that represent real-world situations, applying addition, subtraction, multiplication, and division.
- Solve one-step inequalities to describe real-world situations, and graph solutions on a number line.
- Identify functions from tables, graphs, and equations.
- Solve systems of equations using graphing, substitution, and elimination methods to find solutions to real-world problems.

## Student Expectations

This course requires the same level of commitment from students as a traditional classroom course.

Students are expected to spend approximately 5–7 hours per week online on:

- interactive lessons, which include a mixture of instructional videos and tasks.
- assignments, in which they apply and extend learning in each lesson.
- assessments, including quizzes, tests, and cumulative exams.

# Basic Algebra II

## Communication

Teachers will communicate with students regularly through discussions, emails, chats, and system announcements. Students will also communicate with classmates, either via online tools or face to face, to collaborate, ask and answer questions in peer groups, and develop speaking and listening skills.

## Grading Policy

Students will be graded on work completed online and work submitted electronically to the teacher. The weighting for each category of graded activity is listed below.

Grading Category	Weight
Assignments	20%
Lesson quizzes	30%
Unit tests	30%
Cumulative exams	20%

## Scope and Sequence

When students log on to Imagine Edgenuity, they can view the entire course map—an interactive scope and sequence of all topics under study. The units of study are listed below

Course Units
Unit 1: Foundations of Algebra
Unit 2: Linear Equations and Inequalities
Unit 3: Graphing and Functions
Unit 4: Systems of Equations