

Prerequisite courses: none

Grade level: 9-12

Course Description

This course introduces students to essential geometric concepts, including coordinate geometry, angle relationships, polygons, and circles. Students will learn to plot points, interpret shapes, and calculate measurements such as distances, areas, and perimeters using the coordinate plane. The course integrates algebraic methods and geometric reasoning to solve practical problems involving triangles, quadrilaterals, and composite figures. Through activities such as the construction of geometric figures, students will deepen their understanding of spatial relationships and develop critical thinking skills.

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.

Course Objectives

Students will meet the following goals in this course.

- Develop the ability to graph, name, and analyze points, shapes, and distances in the coordinate plane.
- Identify and use angle relationships to solve for unknown measures in various geometric figures.
- Apply properties of parallel and perpendicular lines to analyze shapes and write equations of lines.
- Calculate the areas, perimeters, and other measurements for polygons, irregular figures, and circles, including fractional dimensions.
- Determine missing values in triangles and quadrilaterals.
- Apply knowledge 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 Geometry I

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: Coordinate Geometry
Unit 2: Angle Relationships and Properties
Unit 3: Area and Perimeter
Unit 4: Circles