



## **Course Description**

In Geometry, you will use the algebraic skills learned in Algebra 1 and apply them towards geometric skills. Geometry focuses on the properties and applications of common geometric figures in both two- and three-dimensions such as points, lines, planes, polygons, circles, prisms, pyramids, cylinders, cones, and spheres.

The science of mathematics is humanity's way of seeking to quantify and describe the vast and infinite creation of God using mathematical symbols, operations, and principles; and its purpose is to seek to explain, model and solve real world situations. In this course, you will apply both inductive and deductive reasoning as you look for patterns and create proofs; as well as applying formulas for calculating distance, midpoint, perimeter, circumference, area, and volume of various geometric figures.

This is a yearlong course consisting of 13 units. Upon successful completion students will receive 1 credit towards high school graduation.

# **Course Prerequisites**

Minimum grade of a "C" in Algebra 1.

### **Course Overview**

#### Semester 1

- Basics of Geometry
- Reasoning and Proofs
- Parallel and Perpendicular Lines
- Transformations
- Congruent Triangles

### Semester 2

- Relationships Within Triangles
- Quadrilaterals and Other Polygons
- Similarity
- Right Triangles and Trigonometry
- Circles
- Circumference and Area
- Surface Area and Volume
- Probability

## **Required Course Materials**

Please access the list of course materials from the OC Online book ordering system and order your materials as soon as possible. Oftentimes, course materials are on back order and you may experience a delay in receiving them, causing students to fall behind in their online coursework. When ordering used or rented materials, be careful that online access codes are also current.

### **Methods of Evaluation**

Students will demonstrate mastery through the following formative and summative assessments:

- 40% Assignments
- 10% Participation
- 10% Quizzes
- 25% Final Assessment
- 15% Unit Tests

#### **Additional Course Information**

Detailed information regarding OC Online policies on proctored final exams, grading policy, late/missing assignment policy, weekly live classes, course expectations, and additional school policies can be found on the website.