



## EduCalc Learning Geometry

### **Instructor**

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### **Course Description**

Students in this course build on mathematical concepts to learn the tenets of geometry. They learn to prove statements using postulates, theorems, and definitions. They work with polygons, circles, and transformations to describe the world around us.

### **Fully Online Course**

This is an online course through the learning management system, Canvas. Activities consist of reading text, watching instructional videos, and taking online quizzes and tests. This is a one-credit course upon completion of all 8 units.

### **Scope and Sequence**

<b>Unit</b>	<b>Title</b>	<b>Topics Include</b>
Unit 1	Introduction to Geometry	Postulates, theorems, bisectors, symbols, if-then statements.
Unit 2	Proofs	Two-column proofs, properties, reasoning, bisectors.
Unit 3	Angles and Polygons	Pairs of angles, corresponding parts, parallel lines and transversals.
Unit 4	Congruent Triangles	SSS, SAS, ASA, HL, AAS.
Unit 5	Transformations	Rotation, reflection, translation, dilation.
Unit 6	Polygons	Interior and exterior angles, Special Triangles
Unit 7	Proportions	Similarity, Geometric Mean
Unit 8	Quadrilaterals	Properties of quadrilaterals, distance formula, slope.
Unit 9	Circles	Equation of a circle, arcs, central angles, sectors.

### **Grading Policy**

Quizzes and tests are percentage based (number correct divided by total questions). Assignments are automatically set for two tries if a student wants to improve their grade.