

# Geometry



## Student Testimonials

Click Names

[Faven](#)

[Matt](#)

[Lauren](#)

## Prerequisite Essential Concepts

- Solving Equations
- Graphing on Coordinate Plane
- Middle School Geometry Concepts

## Program of Studies Key Concepts

This course is the standard track for the majority of students. The course will cover all state standards for Geometry and you will take the SOL test at the completion of the course. Students are expected to be hard workers and well motivated.

- Basic Concepts
  - Points, Lines, Planes
  - Angle & Segment Measurement
  - Angle and Segment Bisectors
- Logic
  - Inductive & Deductive Reasoning
  - Two Column Proof
  - Venn Diagram
- Polygons
  - Classification
  - Angle Measure
  - Area of Regular Polygons
- Circles
  - Arcs and Chords
  - Inscribed Angles
  - Tangents and Secants
  - Circumference

## Homework Expectations

- 60 minutes per 90 minute class

## Basic Supplies

- Scientific Calculator
- Pencils, Erasers, Paper
- Ruler, Graph Paper
- Compass, Protractor

<ul style="list-style-type: none"> <li>• <u>Parallel &amp; Perpendicular Lines</u> <ul style="list-style-type: none"> <li>○ Transversal &amp; Parallel</li> <li>○ Corresponding Angles</li> </ul> </li> <li>• <u>Triangles and Congruence</u> <ul style="list-style-type: none"> <li>○ Classification &amp; Proof</li> <li>○ Coordinate Proof</li> </ul> </li> <li>• <u>Properties of Triangles</u> <ul style="list-style-type: none"> <li>○ Perpendicular &amp; Angle Bisectors</li> <li>○ Concurrency, Median, Altitude</li> </ul> </li> <li>• <u>Ratio, Proportion &amp; Similarity</u> <ul style="list-style-type: none"> <li>○ Geometric Mean</li> <li>○ Similar Polygons</li> </ul> </li> <li>• <u>Right Triangles</u> <ul style="list-style-type: none"> <li>○ Pythagorean Theorem</li> <li>○ Trigonometric Ratios</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• <u>Solids</u> <ul style="list-style-type: none"> <li>○ Surface Area &amp; Volume</li> <li>○ Scale Factor</li> <li>○ Isometric Drawing</li> <li>○ Nets</li> </ul> </li> <li>• <u>Transformations</u> <ul style="list-style-type: none"> <li>○ Reflections</li> <li>○ Rotations</li> <li>○ Translations &amp; Vectors</li> <li>○ Dilation</li> </ul> </li> <li>• <u>Constructions</u> <ul style="list-style-type: none"> <li>○ Congruency</li> <li>○ Bisectors</li> </ul> </li> </ul>	<p><u>Prerequisite Courses</u></p> <p><u>Math 8 or Algebra Part 1</u></p> <ul style="list-style-type: none"> <li>• <u>Algebra 1</u></li> </ul>
--	--	--