

Troy High School
Course Profile

Course Title: Geometry Honors

Course Prerequisites: Refer To Registration Presentation

Course Description:

Geometry continues the three-year college-preparatory mathematics sequence begun in Algebra 1. The course introduces the student to the principles of inductive and deductive reasoning implications, coordinate and transformational geometry, the properties of polygons and circles, and concepts of area and volume. The student expands his/her ability to explore and solve problems mathematically, think logically and critically, and communicate mathematical ideas clearly. In addition, the student will receive rigorous instruction in the writing and analysis of mathematical proofs.

Students entering this course should already have a mastery of the following concepts and possess the following skills:

- Excellent critical thinking and problem solving skills
- Mastery of operations on fractions
- Excellent experience with application problems
- Solving systems of equations
- Solving quadratic equations using factoring
- Quadratic formula and completing squares
- Solving multi-step equations and inequalities
- Operations of rational numbers
- Simplify radicals
- Writing equations of lines
- Proportions
- Common applications of algebra

Workload Expectations for this course (list typical amount of homework, projects, presentations, papers, etc.):

- Homework -30-45 min. Daily
- Generally a quiz or a test every week.
- 1 project per semester