## DEPARTMENT: MATHEMATICS

## NAME OF COURSE: GEOMETRY HONORS

## **GENERAL DESCRIPTION:**

Geometry Honors is a one year course which introduces the student to the fundamentals of plane and solid geometric figures. Many topics will be embellished. Problem solving and the development of critical thinking skills will be a major component of this course. Students will be challenged by SAT-type questions, as well as by problems that have appeared on previous mathematics competitions. Students are expected to actively participate in classroom discussion and demonstrate outstanding achievement on a consistent basis. Among the units of study covered during the year will be congruent and similar triangles, formal and informal proofs, transformational geometry, solid geometry, circles, locus and coordinate geometry, and linear-quadratic systems of equations.

In addition to the development of skills necessary for the students' progression to higher level courses in this subject area, we seek to cultivate a sense of appreciation of mathematics for its aesthetic value.

#### MAJOR TOPICS COVERED:

The units of study can be seen at the website: <u>http://www.emsc.nysed.gov/ciai/mst/mathstandards/geometry.htm</u>. <u>http://www.engageny.org</u>

TEXTBOOKS: <u>GEOMETRY</u> structure and Methods by McDougal Littell

## **REQUIREMENTS:**

Students are expected to maintain a set of well organized notes in a mathematics

notebook, complete daily homework assignments, and read selections from texts as assigned. Regular attendance is expected, and students are to make up work missed due to absences. Students should seek extra help during the school day in the mathematics study center or after school with the teacher when necessary. Appropriate behavior, respect for self and others, and participation in classroom activities are expected.

# GRADING PROCEDURES:

The grade for each of the four marking periods is determined by unit exams, quizzes, and timely completion of homework assignments. Students will take the **Common Core Geometry Regents Examination June**. Extra credit options are given at the discretion of the teacher. A departmental final exam comprises one-fifth of the fourth quarter grade. The student's final average will be determined by averaging the four quarter grades and the Regents grade equally.