## DEPARTMENT: MATHEMATICS NAME OF COURSE: GEOMETRY LAB GENERAL DESCRIPTION:

This is a laboratory course which provides extra support for those students who have had identifiable weakness in mathematics. It is a supplement to the Regents level of Geometry in which each of these students is enrolled. The class will address the same topics found in that course: algebra and geometry, probability, statistics, and logic. This class will meet on alternate days throughout the year. In the lab, students will be provided with workbooks to supplement the text and help them to prepare for the Geometry Regents examination. Those students who meet the Regents requirement by passing the course and the Regents will receive regular Regents course credit. It is expected that those students who succeed in this course will continue to take Regents level courses. 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:

Mathematical Operations: Numerical and algebraic; Algebraic expressions and open sentences Properties of operations: Commutative, Associative, and Distributive; Logic: Conjunction, Disjunction, Conditional, and Compound sentences; Operations with monomials and polynomials Solutions to first degree equations and inequalities in one variable; Ratio and proportions Geometry: Angles and parallel lines, perpendicularity, geometric figures, similarity, congruence, and constructions; Special products and factoring; Probability: Empirical, theoretical, counting principle, and permutations; Statistics: Histogram, mean, median, and mode; Graphs of linear open sentences in two variables; Operations with real numbers (rational and irrational); Quadratic equations: Solving by factoring; Pythagorean Theorem.

## **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:**

Students will receive a grade of HP, P, or NC based upon their work in class.