

MATHEMATICS DEPARTMENT

Integrated Algebra **Course No: 04730** **Length: 40 Weeks**

Grade Level: 8-9

Prerequisites: Teacher recommendations plus an average of 80% or above in Math 8 or 85% or above in Math 7 Accelerated

Course Description & Objectives:

Integrated Algebra is the first year of high school mathematics. It will review and expand upon topics presented in the middle school curriculum, as well as introduce new areas of study. Integrated Algebra topics include: number theory & sets, algebraic expressions, geometric formulas, ratio & proportions, basic operations with polynomials, linear equations & inequalities, probability, statistics, radicals, factoring, quadratic equations, exponential functions, Pythagorean Theorem, right triangle trigonometry and algebraic fractions.

The objectives are:

1. Successful completion of the first year mathematics course towards the three year New York State mathematics requirement.
2. To prepare students adequately for success on the Integrated Algebra Regents exam.

Instruction Processes and Materials:

Daily lectures, demonstrations, student practice, assignments, review, re-teaching (as needed), and cumulative reviews and retesting make up the instructional process. Positive class participation is of major importance.

Course Requirements & Evaluative Criteria:

Regular participation in class work, completion of daily homework, performance on quizzes, chapter tests, mid-year exam (optional), notebook (optional) and final exams.