

**IB MYP Mathematics, Year 3  
8<sup>th</sup> Grade Algebra I****Description**

This course will start off with topics from the 8th grade NYS mathematics curriculum: (1) formulating and reasoning about expressions and equations, including modeling an association in bivariate data with a linear equation, and solving linear equations and systems of linear equations; (2) grasping the concept of a function and using functions to describe quantitative relationships; (3) analyzing two- and three-dimensional space and figures using distance, angle, similarity, and congruence, and understanding and applying the Pythagorean Theorem. Algebra I topics include nonlinear functions, including quadratic and exponential relationships. The expectation for this class is that every student works hard and that every student succeeds.

**CCLS Major Emphasis Clusters**

Expressions, Equations and Inequalities

- Work with radicals and integer exponents
- Perform arithmetic operations on polynomials
- Create equations that describe number of relationships
- Solve equations and inequalities in one variable
- Represent and solve equations and inequalities graphically

Functions

- Define, evaluate, and compare functions

Geometry

- Understand congruence and similarity

Interpreting Categorical and Quantitative Data

- Interpret linear models

**Course Units****Semester 1:**

Unit 1: Exponents and Scientific Notation

Unit 2: Congruence

Unit 3: Similarity

**Semester 2:**

Unit 4: Linear Equations

Unit 5: Linear Statistics

Unit 6: Nonlinear Functions

**Assessment**

Students' academic progress will be assessed in a variety of ways. Formative assessments, such as quizzes, homework and class work (both individual and group work) will be worth 40% of the overall grade. The remaining 60% will consist of summative assessments (unit projects and unit exams).

**Ms. Padovano's Contact Information**

Feel free to schedule an appointment for extra support.

Theresa.Padovano@K497.org / Room 126