

**Math Skills Building
Course Syllabus
Academic Expectation fulfilled: Critical Thinking**

Teacher: Mr. Lanpher

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Textbook: Algebra 1, Big Ideas Math, Larson Boswell

Mathematics Department's **enduring understandings:**

Students will demonstrate the ability to:

- transfer previous knowledge to makes understand new concepts.
- communicate mathematics both orally and in well-written sentences and explain solutions to problems.
- use technology to help solve problems, experiment, interpret results, and verify conclusions.
- model a written description of a physical situation with a function, an equation, or an inequality.
- determine the reasonableness of solutions including sign, size, relative accuracy, and units of measurements.
- classify elements (real numbers, figures, functions, etc) by their attributes.

Mathematics Department's **essential questions:**

- Why is it important to study mathematics?
- What are the basic skills necessary to be successful in high school and college-level mathematics?
- How do you envision yourself applying mathematics in your life?

Course Overview:

This is designed to provide support for students who struggle with a variety of skills that would inhibit their ability to fully access and engage with their inclusion math curriculum. The focus of the class is individual to the students and their current areas of growth which could include, but are not limited to; math fact fluency, fractions, decimals, percents, and pre-algebra skills. This class is based on a Tier II intervention model and provides support to students who require more support in addition to their core curriculum through a systematic, data driven, and purposeful process. Response to Intervention (RtI) is the practice of providing high quality instruction and interventions matched to student need, monitoring progress frequently to make decisions about changes in instruction or goals and applying student-outcome data to important educational decisions. RtI should be applied to decisions in general, remedial, creating a well-integrated system of instruction/intervention, guided by student outcome data.

Student Outcomes:

Upon completion of this course, students should be able to analyze and solve problems, communicate mathematically, and make connections within the following topics:

- ü Connections to Algebra
- ü Properties of Operations with Real Numbers
- ü Solving Linear Equations

- ü Graphing Linear Equations and Functions
- ü Writing Linear Equations
- ü Solving and Using Systems of Linear Equations and Inequalities
- ü Exponents
- ü Quadratic Equations
- ü Polynomials and Factoring
- ü Rational Equations and Functions

Expectations for Student Performance, Grading Standards, & Extra Help Arrangements:

See Mr. Lanpher classroom requirements