

Algebra 1



Mr. Ryan Room 153

Course Overview

Algebra 1 is a first year high school math course that lays the foundation for the remainder of high school math courses and provides a foundation of math concepts and procedural fluency. Students are required to pass Algebra 1 in order to move on to future classes and to graduate high school. The content of Algebra 1 is organized around five major topics: patterns, constant change, growth and decay, describing distributions and maximizing and minimizing. Students learn to represent functions verbally, as equations, tables, and graphs. They will also develop an understanding, interpret, solve and analyze functions in various applications. There is an emphasis on problem-solving and modeling real-world situations.

Course Objectives

By the end of this course you will be able to demonstrate a good understanding of the principles, processes and vocabulary related to the following areas:

- **Module 1:** Patterns: introduction to functions, sequences, and regressions.
- **Module 2:** Linear Functions: solving linear equations and inequalities, graphing linear equations and inequalities, and systems of linear equations and inequalities.
- **Module 3:** Exponential Functions: exponential growth and decay, writing and applying exponential equations to solve problems.
- Module 4: Statistics: one-variable statistics and two-variable categorical data.
- Module 5: Quadratics: introduction to quadratic functions, solving quadratic functions, applications of quadratics.

Required Materials

- 1. Pencil
- 2. Calculator (phone with desmos calculator app okay)
- 3. Chromebook (fully charged to start every school day)

Notes and assignments will be left in class at the end of each period unless a student chooses to take home the materials to complete at home. This will help students stay organized and have the materials they need each day for class. Completing notes and assignments will be vital to success in the class.

All assessments in Algebra 1 will be open notes meaning the better notes you take in class, the better your resources will be when taking an assessment. Most notes will be through graphic organizers meaning that if you follow along in class and complete the assignments you will have all the tools necessary to succeed in an assessment.

Classroom Rules and Expectations

- 1. Follow the classroom rule of respecting yourself, others and the school.
- 2. Be on time to class. To be on time for class you must be in your seat, with your materials, ready to go when the bell rings.
- 3. Computer/phone usage is for class work only. Accessing social media, games, and other non-course work is not allowed unless explicitly approved.

Tests and Ouizzes

Tests and quizzes will cover the material from class notes and assignments. If you work hard, take notes, complete your assignments, and come in for help when you need it, you should do well in this course. Retakes will be allowed on all tests and quizzes if an effort has been made to show that you have learned the material which includes completing test corrections and any missing assignments for that unit. Retakes must be scheduled with me during office hours, prep, or before/after school. Only one retake is allowed per student per assessment once a passing score (C or better) has been reached.

Assignments

Assigned work will be an important piece of the learning process in this class. While traditionally called homework, I prefer the term "assignment" because, for most assignments, I will provide time in class to complete work and ask any questions that the student may have. These assignments allow students the chance to practice the skills learned to find out where they still have questions. If you do not do your assignments, you will miss out on the opportunity to find out what questions you have, and to get those questions answered.

While I will grade assignments, I will not be grading assignments on a daily basis. I believe your grade should be based on what you know of the subject. As such, your grade will be calculated using the total points you receive from your graded assignments, quizzes, tests, projects and other activities. By doing your assignments, you can ensure that you are prepared for the material that will be covered in your quizzes and tests.

Absences

If you are absent for any reason, it is your responsibility to find out what you missed. The expectation is that you check Google Classroom, before you come to ask the teacher what was missed.

If you miss a test or a quiz due to an absence you must schedule a time with me to complete the task. This is typically done during office hours, but can be done via appointment either at lunch, before school, or after school. It is your responsibility to talk to me about this.

Grades

Grades will be weighted on the following scale: Assessments: 70%

Assignments: 30%

This is done in order to both encourage students to complete valuable class assignments and ensure students understand the required content in order to pass the class.

Contact Information

Please feel free to contact me at any time. I am best reached by email, but if you call and I am not available, please leave a message and I will return your call as soon as I am able. I will be available to meet during office hours, as well by appointment during my prep periods (1st and 6th), along with before and after school or during lunch.

Nathan Ryan (406) 728-2402 x6608 nryan@mcpsmt.org