

Phone: 713-688-1361 Website: www.houstonisd.org/waltrip

Algebra 1 Course Syllabus 2022-23

Instructor: Matthew Steiner Email: Matthew.Steiner@houstonisd.org Room: 3210

Office Hours: Monday (10:10am-10:55am) & Tue/Thu (10:50am-12:25pm) & Wed/Fri (1:05pm-

2:35 pm)

Waltrip Mission

Waltrip High School fosters a safe and challenging learning environment, preparing students for post-secondary education and a competitive global workforce through rigorous core academic instruction, comprehensive social-emotional supports, an array of quality fine arts programs, and comprehensive career and technology education.

Course Content

In Algebra I, students will build on the knowledge and skills for mathematics in Grades 6-8, which provide a foundation in linear relationships, number and operations, and proportionality. Students will study linear, quadratic, and exponential functions and their related transformations, equations, and associated solutions. Students will connect functions and their associated solutions in both mathematical and real-world situations. Students will use technology to collect and explore data and analyze statistical relationships. In addition, students will study polynomials of degree one and two, radical expressions, sequences, and laws of exponents. Students will generate and solve linear systems with two equations and two variables and will create new functions through transformations.

Text

The textbooks for the course are as follows:

- Texas Algebra 1 located on Digital Resources through Canvas
- Weekly lesson organizers on Canvas

About the Teacher

Ongoing Objective

- By the end of this course, the student will have mastered the reading, writing, speaking, and listening skills as written in the Texas Essential Knowledge and Skills for Algebra 1.
- Students will also have gained an understanding of the math section of the PSAT examination used by evaluators across the United States for college admissions. Elements of the verbal section include solving equations, linear functions and systems, sequences and exponential functions.
- The student will reflect on their learning through daily written reflections.

Grading Scale

Grades are based on points earned on tests, quizzes, problems sets. Each category is weighted as follows:

- Lessons/Class engagement 20%.
- Students earn points in this category by participating in weekly lessons. Lessons will be posted in Canvas for viewing on Monday.
- Students earn points in the category by completing the daily reflection posted in Canvas.
 Exams/projects- 30%
- Students earn points in this category by completing the assessments and projects located on the HUB under Plans.
- Classwork/group work **50%**
- Students earn points in the category by completing the weekly online assignments posted on the HUB. Each week an assignment will be given on the Texas Algebra 1 online textbook that must be completed and submitted in order to receive credit.

A = 90% - 100% B = 80% - 89% C = 75% - 79% D = 70% - 74% F = 69% & below

Class Schedule

Students will attend class each day the class meets. On Mondays we will review the weekly lesson and go over the weekly expectations. On Tuesday/Thursday and Wednesday/Friday we will meet live to go over guided practice and then students will be responsible for completing assignments on their own.

Attendance and Participation

Attendance and participation are required; it is difficult to learn the content if you are not present in class. You class participation and attendance can be a deciding factor if your class average straddles two grades.

Make-Up Work

- 1. It is the student's responsibility to obtain and make up work missed due to excused absences.
- Make-up work is due one day after the student returns to school following an absence: If you
 miss school on Monday but return to school on Tuesday then your work is due Wednesday. If
 you are in school Monday but miss Monday's class, your work is still due on Monday; come see
 me before you leave early.

Retake Policy

- 1. You are permitted a maximum of 2 retakes for exams only.
- 2. The highest grade between the original and the retake is counted.
- 3. Semester Exams are not eligible for retake.

Handing in Assignments/Late Work

- 1. Always turn in your assignments to receive feedback.
- 2. All assignments are due ON TIME. Late assignments receive a maximum score of 90% and are not permitted for extra credit points or retake/correction points.

Daily Required Materials (all provided)

- 1. Laptop
- 2. Pencil
- 3. Composition book
- 4. Graph paper

Unit Overviews

Unit One - Equations and Inequalities

Unit Two – Introduction to Functions

Unit Three – Rate of Change/Slope of Lines

Unit Four – Equations of Lines

Unit Five – Transformations of Linear Functions

Unit Six – Scatterplots and Trend Lines

Unit Seven – Linear Inequalities

Unit Eight – Systems of Linear Equations

Unit Nine – Systems of Linear Inequalities

Unit Ten – Sequences

Unit Eleven – Exponents and Radicals

Unit Twelve – Polynomial Operations

Unit Thirteen – Factors of Polynomials

Unit Fourteen – Division of Polynomials

Unit Fifteen – Quadratic Graphs and Their Properties

Unit Sixteen – Solutions of Quadratic Equations

Unit Seventeen – Quadratic Functions

Unit Eighteen – Transformation of Quadratic Functions

Unit Nineteen – Exponential Functions

Unit Twenty – Readiness and Supporting Standards Review

Unit Twenty-one – Transformation of Linear and Quadratic Functions

Unit Twenty-two – SAT Review