Algebra II

Course Overview:
Algebra II is building on your strong foundation of Algebra 1. Students will continue to strengthen their reasoning and problem solving abilities and extend their Algebra I skills through a series of inquiry-based units that cover quadratic expressions, equations, and functions; comparing their characteristics and behavior to those of linear and exponential relationships from Algebra 1. The need for extending the set of rational numbers arises and real and complex numbers are introduced so that all quadratic equations can be solved. Strong emphasis will be based upon deepening our understanding of math by seeking out connections, using productive math communication.

Units and Activities: What will we be learning about and doing in this course?

Units:
- Modeling Data
- Quadratic Functions
- Structure of Expressions
- Solving Quadratics and Other Equations
- More Functions, More Features

Activities/Projects:
- Projectile Project
- Parabolas in our Lives Project
- Walk Around Activities
- Scavenger Hunts

Standards: What knowledge and skills will I gain by the end of this course?

Anchor Standards: A student will have multiple opportunities to show their proficiency in each Anchor Standard below.
- Sense Making and Problem Solving - Students will start by explaining to themselves the meaning of a problem and looking for entry points to its solution.
- Modeling - Students can apply the mathematics they know to solve problems arising in everyday life, society, and the workplace.
- Attending to Precision - Students will communicate precisely to others.
- Making Use of Structure - Students will look closely to discern a pattern or structure.
- Recognizing and Using Patterns - Students notice if calculations are repeated, and look both for general methods and for shortcuts.

Content Standards: This course builds student knowledge using the Common Core State Standards for Mathematics. The content standards for Algebra II are:
- Algebra, Functions, Number and Quantity, Modeling, and Statistics.

Assessment of Learning:
For information about assessment types, scoring, and overall grade calculation: click here.

Communication:

How Do I Access Work from Home, and What Should I Expect?
- All work will be posted in Google Classroom.
- The work will be explained during our in-person meetings and/or by video posted to Google Classroom.
- The work will also be explained in our Class Planner posted to Google Classroom.
- If you have any questions, email your teacher.

How Do I Know What My Grades Are?
- On Summative Assessments, teachers will provide both a 4-point grade and a letter grade.
- You can monitor your progress in the following ways:
  - By reading feedback and scoring returned to students on summative assessments.
  - By monitoring the scores and Overall Course Mastery Grade in the Parent/Student portal on JumpRope. Reminders to check grades will be sent from the school.
  - Communicating with your teacher if you are unclear.

**Where Can I Find This Syllabus during the School Year?**
- This syllabus will be available on the school website in each subject’s department tab once the school year is up and running. It will also be available in our Google Classroom.

**How Do I See What’s Due?**
- Assignment and summative assessment due dates with handouts are posted in Google Classroom, with connection to Google Calendar, for student access.

**How Do I See What’s Past Due?**
- If a student is missing a grade on an assessment, it will be listed in the red “Missing Assessment” section of the JumpRope Parent/Student Portal along with any attachments. Please contact your teacher if you have any questions.

**Materials:**
Students need to have:
- A two pocket folder
- A writing utensil
- Clipboard

**Schoolwide Procedures:**
*Please see the Student Handbook for Procedures and Policies related to:* Due dates and deadlines, extra credit, retaking assessments, and turnaround time for grade entry.
*Personal Mobile Devices:* This class will follow the procedures outlined in the student handbook.

**Classroom Expectations:**
Classroom norms and expectations will be established collaboratively during the first weeks of school and will be accessible on request at that point.