Course Description

This is the first of 2 courses that will make up the Algebra I graduation requirement. Algebra I focuses on the mastery of five critical areas: (1) developing an understanding of relationships between quantities and reasoning with equations; (2) developing, understanding and applying linear and exponential relationships; (3) investigating trends and modeling with descriptive statistics; (4) performing arithmetic operations on polynomial expressions, solving equations, inequalities, and systems of equations; and (5) using properties of rational and irrational numbers to develop an understanding of quadratic functions. It is recommended that each student have a graphing calculator, but there are online calculators available for use.

Expectations*

Be Respectful
Be Present
Be Prepared
Be Responsive
Be Mindful

*All rules/policies listed in the school/county handbooks will be followed.

Grading

50% Mastery (7)
50% Progress (at least 24)

Students may retake a Mastery Assessment (unit test) if they score below a 70%. Mastery assessments include unit tests, projects, or a cumulative assessment for the course.

Progress Assessments include classwork, homework, warm-ups, quizzes and/or other work completed for the course.

Work will be considered LATE after 3 school days and deduction of points will occur. Assignments will not be accepted after 10 school days.

Materials

- Textbook
- Workbook
- Notebook/Paper
- Pencils/Erasers
- Laptop/Schoology
- Calculator

Academic Honesty

All students at Queen Anne’s County High School are expected to conduct themselves with great pride in academics and the community at large. To this end, it is expected that all students will maintain academic integrity in every assignment. Work must be completed individually unless otherwise directed by the teacher. Plagiarism is a severe offense at QACHS and will result in immediate consequences. The use of Photomath and other electronic sources without permission is a form of plagiarism.
Students must log into our class on schoology every school day to be counted as present. Students should complete daily work to keep up with the class. The teacher/school should be contacted if a student will be absent from class. Students are responsible for all missing work due to an absence.

**Online Learning Expectations**

**Synchronous** – Join the video conference on time and have materials ready. These materials include pencil, paper, calculator and any websites needed to complete math work. Have Schoology open and ready to go in a browser. You are expected to be on the video conference for the duration of class. Please find a quiet place in your house and give yourself an area to work.

**Asynchronous** – Assignments that are asynchronous are to be done on your own; however, I am available for help during the designated asynchronous period. Also during this time you may be asked to attend a video conference for small group instruction. Small group instruction, if assigned, is mandatory.

**Check-in Day** – Every Wednesday there will be a brief 10 minute video conference or check in to provide a brief period of instruction and to ensure all students are on track with the current assignments. Students will also complete an asynchronous assignment on check-in day.

**Office Hours** – Every day except for Wednesday there are Office Hours set aside for reteaching, 1:1 or group tutoring, small group instruction and student/parent meetings. You may schedule a time during office hours for tutoring. You may also attend a tutoring or instructional video conference during office hours. Office hours are considered part of the school day, so tutoring or conferences scheduled during this time are mandatory. If there is an instructional conflict during the requested time, we will work together to find a time that works.

**Course Outcomes**

I addition to studying the topics mentioned, students will be expected to demonstrate mathematical habits related to the following mathematical practices:

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics.
5. Use appropriate tools strategically.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning.

**Course Topics**

- Solve equations and inequalities
- Write and graph linear equations
- Transform and analyze linear functions
- Solve systems of equations and inequalities
- Analyze absolute value and piecewise functions
- Evaluate and transform exponential functions