

COURSE: Algebra 1

TEACHER: Briana Pattillo

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COURSE DESCRIPTION

The overall goals of Algebra 1 are to formulate and reason with linear expressions, equations, & inequalities and develop the concept of functions: linear, exponential, quadratic, & radical. Other goals include, understanding and applying systems of linear equations & inequalities, in addition to developing an understanding of statistics and probability.

COURSE OBJECTIVES

Some of the main objectives for Algebra 1 are to:

- Use the structure of an expression to identify ways to rewrite it.
- Create equations and inequalities in one variable and use them to solve problems.
- Solve linear equations and inequalities in one variable, including equations with coefficients represented by letters.
- Understand that a function from one set (called the domain) to another set (called the range) assigns to each element of the domain exactly one element of the range.
- Use function notation, evaluate functions for inputs in their domains, and interpret statements that use function notation in terms of a context.
- Create equations in two or more variables to represent relationships between quantities; graph equations on coordinate axes with labels and scales.
- Calculate and interpret the average rate of change of a function.
- Graph linear and quadratic functions, and show intercepts, maxima, and minima.
- Interpret the slope (rate of change) and the intercept (constant term) of a linear model in the context of the data.
- Solve systems of linear equations exactly and approximately (e.g., with graphs), focusing on pairs of linear equations in two variables.
- Use the properties of exponents to interpret expressions for exponential functions.
- Explain how the definition of the meaning of rational exponents follows from extending the properties of integer exponents to those values.
- Rewrite expressions involving radicals and rational exponents using the properties of exponents.
- Use the properties of exponents to transform expressions for exponential functions.
- Understand that polynomials form a system analogous to the integers.
- Factor a quadratic expression to reveal the zeros of the function it defines.
- Solve quadratic equations in one variable.
- Graph square root, cube root, and piecewise-defined functions, including step functions and absolute value functions.
- Represent data with plots on the real number line (dot plots, histograms, and box plots).
- Use statistics appropriate to the shape of the data distribution to compare center (median, mean) and spread (interquartile range, standard deviation) of two or more different data sets.
- Understand that two events A and B are independent if the probability of A and B occurring together is the product of their probabilities and use this characterization to determine if they are independent.

COURSE SCHEDULE OF TOPICS

1st Semester Topics

Reasoning and Expressions
Linear Equations
Linear Inequalities
Linear Functions/Equations
Systems of Linear Equations/Inequalities

2nd Semester Topics

Exponents and Exponential Functions
Quadratics (Operations and Factoring)
Radical Functions
Quadratic Relationships
Statistics and Probability

REQUIRED STUDENT RESOURCES

Paper & Pencils
Hand held pencil sharpener
Scientific Calculator
Charged Chromebook
Please note that the 8th grade supply list includes items we will use in this class.

WISH LIST

AAA Batteries
Paper towels & Tissues
Clorox Wipes
Markers
Hand-sanitizer

HOMEWORK, BELL RINGERS & NOTES

It is imperative that homework is completed each night in order to be successful in this course. Homework is intended to give your student reinforcement of topics in class, or a resource for studying. Homework may include watching a video in Edgenuity. The bell ringers will be completed in Edulastic. Your student will also want to keep notes. If I write it, then you need to write it. Ask questions! Ask for help as needed, you do not want to wait until the day before a test to ask for help.

EVALUATION PROCEDURES AND GRADING CRITERIA

In this class you will complete hands-on activities, assignments, quizzes, and projects. Each student will have between 8-12 daily grades and 3-5 test grades each nine weeks. Students will be doing a lot of group/pair work in this class. All students are expected to contribute to the assignment and to work collaboratively with the other student(s) in the group. A rubric will be used for all group work and projects.

GRADING SCALE

A = 90 – 100

B = 80 – 89

C = 70 – 79

D = 60 – 69

F = 0 – 59

WEIGHT OF GRADES

Daily Grades 35%

Benchmark 5%

Projects/Tests 60%

***Please note that projects will count as test grade.**

LATE WORK POLICY

If work is turned in late, 10 points will be taken each day that it is late. **Commitments to sports, band, dance, cheerleading, drama, or any other extra-curricular activities are not a reason to turn in late work!**

ATTENDANCE STATEMENT

Attendance is critical to your performance in this class; sometimes it is very difficult to make up group work or other in class experiences. However, if you are absent, you are responsible for obtaining the assignments, handouts, etc. from a responsible classmate and/or the absent work folder. **Your absence is your responsibility.** In order to get make-up work, you must turn in an excuse for your absence within 3 days. Make-up work will be assigned in Edgenuity and must be completed within 3 school days of the absence. Students who are not in the classroom when the bell rings are considered tardy. Tardies will be recorded and handled according to the Elmore County Student Code of Conduct. Four tardies to class will result in detention. Tardies start over each nine weeks. Please remember that your attendance will affect your exemption status each semester.

COMMUNICATION

I believe that communication with parents is crucial to a child's achievement. For the quickest response, the best way to contact me is via e-mail at briana.pattillo@elmoreco.com. Having **REMIND** will help Parents and Students stay up to date with the class events and due dates. You can also contact me using the reply feature through text with **REMIND**. You can join by going to the following link: rmd.at/a1pattillo or texting @a1pattillo to 81010.

CLASSROOM GUIDELINES, POLICIES AND PROCEDURES

Students are expected to follow the classroom rules. Minor classroom infractions will be documented on a Classroom Behavior Management Form. Parents will be informed of these infractions. Repeated infractions will result in the student being sent to the administrator. Learning will take place each day as we respect each other by displaying courteous behavior. Each of you will be prepared with classroom materials and assignments, displaying good judgment and always *doing* your best.

CLASS EXPECTATIONS

Be Responsible
Be Respectful
Be Safe

CONSEQUENCES

Warning
Parental Contact
Conference with administrator or parents
Office Referral

Rules & Guidelines:

1. **Students will follow all rules as outlined within the Elmore County Code of Conduct section of the student handbook.**
2. Show respect for everyone, at all times.
3. Listen and follow directions.
4. Raise your hand and wait for permission to speak or leave your seat. Students are expected to be seated & quiet at the beginning of class & during class time.
5. Be on time and be prepared. (Bring charged Chromebook, notebook & paper, pencil, and calculator to class daily. Cell phones will not be used as calculators.)
6. **Keep hands, feet, and objects to yourself.**
7. Place ALL trash into the trash can! There will be no eating during instructional time. No sunflower seeds, ever. (PLEASE, do not leave trash on or around your desk!)
8. The Bell does NOT release students, the teacher will release students.

****PLEASE RETURN THE SIGNED PORTION OF THIS PAGE TO YOUR CHILD’S TEACHER. PARENTS PLEASE KEEP THIS SYLLABUS. STUDENTS WILL NEED TO PUT THE CLASS PROCEDURES PAGE IN THEIR NOTEBOOKS!!! RETURN TO TEACHER BY: FRIDAY, AUGUST 13, 2020.**

Student:

I have read & understand the guidelines, responsibilities, & procedures of Mrs. Pattillo’s Algebra 1 class. I agree to follow the guidelines & procedures set forth in this packet.

Printed Name of Student

Signature of Student

Parent/Guardian: I have read & understand the guidelines, responsibilities, & procedures of Mrs. Pattillo’s Algebra 1 class. If I have any questions, concerns, or problems, I will contact Mrs. Pattillo.

Printed Name of Parent/Guardian

Signature of Parent/Guardian

EMAIL ADDRESS

DAYTIME/CELL PHONE