

Cocke County High School

Part 1: Course Information

Instructor Information

Course: Algebra 2
Instructor: Tracy Groth
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Course Description

Algebra II emphasizes polynomial, rational and exponential expressions, equations, and functions. This course also introduces students to foundational statistics skills such as interpretation of data and making statistical inferences. Students build upon previous knowledge of equations and inequalities to reason, solve, and represent equations and inequalities numerically and graphically.

Prerequisite

- Algebra 1 and Geometry

General Education/High School Pathway Area

- This is one of the four required math courses for graduation.

Textbook & Course Materials

Required Text

- Online

Course Requirements

- Notebook / Binder / Folder
- Paper
- Pencils
- Graph Paper
- TI-84 Calculator

Course Structure

Methods: The course is taught using a variety of instructional methods including lectures, classroom discussions, small group work, and electronic displays.

Assessment Methods**Cumulative Exams**

- A cumulative exam will be given periodically to check for mastery. Exams will count as 60% of the student's grade.

Quizzes

- Daily quizzes will be given that cover the day's content. Quizzes will count as 30% of the student's grade.

Homework

- Classwork will be given daily. Any classwork not finished by the end of class will become homework. Classwork will count as 10% of the student's grade.

EOC

An End-of-course (EOC) assessment will be given by the State of Tennessee towards the end of the semester.

Extra Credit

- **Lowest Quiz Grades :** Lowest quiz grade will be dropped each grading period.
- **Test Retakes:** Students are allowed to retake exams. Students must first fix the original exam, which I will check, then the student will take a different version of the exam, which is best described as same type of problems with different numbers. The highest exam grade (original or retake(s)) will be put into the gradebook. Retakes must be done at school under my supervision. It may be done during a class block or after school.

Part 2: Student Learning Outcomes

The major work of Algebra II is from the following domains and clusters:

- The Real Number System
Extend the properties of exponents to rational exponents.
- Arithmetic with Polynomials and Rational Expressions
Understand the relationship between zeros and factors of polynomials.
- Building Functions
Build a function that models a relationship between two quantities.
Build new functions from existing functions.
- Reasoning with Equations and Inequalities
Understand solving equations as a process of reasoning and explain the reasoning.
Solve systems of equations.

Supporting work is from the following domains and clusters:

- Seeing Structure in Expressions
Interpret the structure of expressions.
- Quantities
Reason quantitatively and use units to solve problems.
- Creating Equations
Create equations that describe numbers or relationships.
- Matrices
Perform operations on matrices and use matrices in applications
- Interpreting Functions
Interpret functions that arise in applications in terms of the context.
Analyze functions using different representations.
- Linear, Quadratic, and Exponential Models
Construct and compare linear, quadratic, and exponential models and solve problems.
- Interpreting Categorical and Quantitative Data
Summarize, represent, and interpret data on a single count or measurement variable.
Summarize, represent, and interpret data on two categorical and quantitative variables.
- Conditional Probability and the Rules of Probability
Understand independence and conditional probability and use them to create visual representations of data
Understand and apply basic concepts of probability.
Use rules of probability to compute probabilities of compound events in a uniform probability model
- Making Inferences and Justifying Conclusions
Make inferences and justify conclusions from sample surveys, experiments, and observational studies

Part 3: Grading Policy

Letter Grade	Percentage
A	100-90%
B	80-89%
C	70-79%
D	60-69%
F	59-0%

Assignment Weight:

Homework: 10%

Quizzes/Chapter Review: 30%

Cumulative Tests: 60%

To calculate grades in Aspen:

(average Homework)(.1) + (average Quiz) (.3) + (average Test) (.6) = GRADE

Part 5: Classroom Rules

Classroom rules:

- Respect each other and your teacher.
- Be prepared to work and participate in class each day.
- Work the entire period. You may prepare to leave 2 minutes before the bell rings.
- Remain in your seat unless the teacher asks you to move.
- Do not write on the desks.
- Students must follow ALL the policies put forth in the student handbook.
 - Cell Phone Policy
 - Dress Code
 - Tardy Policy
- Food and Drinks are allowed (as a privilege & may be taken away).
 - Food/trash must be cleaned up.
 - Drinks must have a cap on it.

***Mrs. Groth is able to add rules as deemed necessary

Academic Dishonesty Policy

If found using a cellphone, copying off of another student, or any other form of cheating, the student will receive a zero for the assignment grade.

Please sign and return to Mrs. Groth**Student Signature**

- I understand the required materials to bring to class every day.
- I understand the class description.
- I understand the expectations listed above.
- I understand the grading policy.
- I understand and will follow the class rules.

Student Name

Student Signature

Student Email**Parent/Guardian Signature**

- I will help my child with the needed materials
- I understand the class description
- I understand the expectation of my child in class
- I understand how my child will be graded
- I understand the class rules my child will need to follow

Parent or Guardian Name

Parent or Guardian Signature

Parent or Guardian Email

