

Cocke County High School

Part 1: Course Information

Instructor Information

Course: Algebra 2

Instructor: Kathryn Banks

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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: enVision Algebra 2/Savvas Realize

Course Requirements

- Chromebook: Fully Charged (or chromebook charger)
- 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.

Structure: A normal day begins with a lesson quiz over the lesson from the day before, followed by a new lesson, and then classwork over the new lesson. Any work that is not finished in class becomes homework.

Assessment Methods

Unit Exams

- A unit exam will be given at the end of each unit to check for mastery. Exams will count as 60% of the student's grade.

Quizzes

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

Classwork/Homework/Participation

- Classwork will be given daily in Google Classroom/Savvas, and counts as 10% of the student's grade. Any classwork not finished by the end of class will become homework. Students can redo classwork/homework assignments.

EOC

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

Extra Credit

- **Leave the Classroom Passes (3):** The student will be allowed to leave the classroom no more than three times each 9 weeks. At the end of each 9 weeks, I will take up the student's hall pass to check how many times the student left the room. For each time the student did not use the pass, I will drop a lowest Cumulative Quiz grade. **If a student has a medical reason to be exempt from the limit of three, please bring in a doctor's note.**
- **Test Retakes:** Students are allowed to retake exams one time. 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) 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. Midterm (3) and Final Exams (6) cannot be retaken.

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: 30%

Cumulative Tests: 60%

To calculate grades in Aspen:

$(\text{average Homework})(.1) + (\text{average Quiz})(.3) + (\text{average Test})(.6) = \text{GRADE}$

Part 5: Classroom Rules

Classroom rules:

- Respect each other and your teacher
- Respect each other's privacy
- 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
- Students must follow ALL the policies put forth in the student handbook
 - Cell Phone Policy
 - Dress Code
 - Tardy Policy
- NO throwing in class whatsoever, detention will be assigned if caught throwing
- Food and Drinks are allowed (as a privilege & may be taken away)
 - Food must be cleaned up
 - Drinks must have a cap on it
- 1 piece of gum is allowed (as a privilege & may be taken away)
 - Must not hear it or see it

***Ms. Banks 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. Banks**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**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

If you have any questions, comments, or concerns, please email me:

banksk@cocke.k12.tn.us