Critical Algebra Syllabus 2023 - 2024

Instructor:
Janice Bowen
MA Mathematics Education

Contact Information:
E-mail: jbowen@nemo.k12.ar.us
Phone: 501-893-2811

Expectations:
I have high expectations for myself regarding instruction. I will teach each topic thoroughly and strive to achieve student understanding of each topic. Likewise, I also have high expectations for each of my students. Each student should be attentive in the classroom and put forth his/her best effort towards mastering each topic presented.

Classroom Policy Regarding Late Work:
The only way to learn math is to do math. For this reason practice problems will be assigned on a regular basis. The due date will be clearly communicated. If the work is not turned in at the beginning of class on the due date a 20% deduction will be made for each day the work is late up to three days late. After three days the grade will be recorded as a zero.

Grades are weighted as follows:
Classwork and/or Homework: 30%
Quizzes and/or Tests: 70%

General Schedule of Topics:

First Nine Weeks:
Properties of Rational and Irrational Numbers
Algebraic Expressions
Solving Equations and Inequalities in One Variable
Applications of Solving Equations and Inequalities in One Variable
Rearranging Literal Equations

Second Nine Weeks:
Function Notation (Domain, Range, Graphs, Interpret Context in Real World Situations, Analyze Using Different Representations)
Linear Functions
Linear Regression
Piece-Wise Functions
Writing and Solving Systems of Equations

Third Nine Weeks:
Polynomials (Simplify, Add, Subtract, Multiply and Divide)
Quadratic Functions, Graphs and Equations
Quadratic Regression
Exponent Rules
Exponential Functions
Exponential Regression

Fourth Nine Weeks:
Radical Expressions (Simplify, Add, Subtract, Multiply and Divide)
Building Functions (Linear, Quadratic, Exponential)
Function Transformations
Interpreting Categorical and Quantitative Data (Represent Data with Plots on the Real Number Line,
Interpret Shape, Center, Spread and Outliers)
Correlation vs. Causation