WINDOW ROCK HIGH SCHOOL
ALGEBRA 2 Course Timeline

Lesson Introduction and Review: Real Numbers, Equations, and Inequalities – (4 weeks)

- Properties of Real Numbers

- Solve/Rewrite Equations

- Solve Linear Inequalities

- Solve Absolute Value Equations/Inequalities

UNIT 1 Graphing Linear Equations and Inequalities - (4 weeks)

- *Relations and Functions*
- *Graph/Write Equations of Lines*
- *Scatter Plots and Lines of Best Fit*
- *Graph Linear Inequalities in Two Variables*

Additional topics: Basic Matrix Multiplication and Multiply Matrices

UNIT 2 Quadratic Functions and Factoring – (7 weeks)

- *Graph Quadratic Functions*
- *Solve Quadratic Functions by Factoring*
- *Solve Quadratic Functions by Finding Square Roots or Completing the Square*
- *Using the Quadratic Formula*

UNIT 3 Polynomials – (5 weeks)

- *Properties of Exponents*
- *Add, Subtract, and Multiply Polynomials*
- *Factor and Solve Polynomial Equations*
- *Apply the Remainder and Factor Theorems*

UNIT 4 Rational Exponents and Radical Functions – (5 weeks)

- *Use and Apply Properties of Rational Exponents*
- *Function Operations and Composition*
- *Use Inverse Functions*
- *Solve Radical Equations*

UNIT 5 Rational Expressions – (4.5 weeks)

- *Model Inverse and Joint Variation*
- *Multiply and Divide Rational Functions*
- *Add and Subtract Rational Expressions*
- *Solve Rational Equations*

UNIT 6 Probability and Introduction to Sequences – (3 weeks)

- *Counting Principle and Permutations*
- *Combinations and the Binomial Theorem*
- *Define and Use Probability*
- *Define and Use Sequences and Series*