Algebra 2 Honors – Tarleton Today Course Outline

Course Description:

This course is structured so that high school students receive the rigor of college courses while also meeting requirements for their high school course. This course will include an in-depth study and applications of polynomial, rational, radical, exponential and logarithmic functions, and systems of equations using matrices which will satisfy the core curriculum requirement for MATH 1314. This course will also include linear functions, absolute functions, and data analysis and modeling which will satisfy the Texas requirements for Algebra 2.

During the course of the year, we will cover the following topics:

- Unit 1: Function Basics
- Unit 2: Systems of Equations and Inequalities and Matrices
- Unit 3: Absolute Value Functions and Complex Numbers
- Unit 4: Quadratic Functions and Characteristics
- Unit 5: Solving Quadratic Equations and Inequalities
- **Unit 6: Polynomial Functions**
- Unit 7: Radical Functions and Equations
- Unit 8: Graphs of Rational Functions
- Unit 9: Simplifying Rational Expressions and Solving Rational Equations
- Unit 10: Exponential and Logarithmic Functions