Plano ISD Algebra 2 Syllabus 2018-2019

1st semester (82 days)

1st Grading Period (42 days)	2nd Grading Period (45 days)
Functions ❖ Writing domain and range in inequality, set and interval notation ❖ Finding characteristics of graphs ❖ Transforming function graphs ❖ Writing the inverses of functions in function notation ❖ Evaluating compositions ❖ Graphing the absolute value functions ❖ Solving absolute value equations ***Quadratics Functions, Equation, and Relations*** ❖ Identifying attributes in vertex form and converting from standard form to vertex form ❖ Writing the equation of a parabola using given attributes ❖ Fitting quadratic functions to data **End of grading period: October 12**	***Continue (Quadratics Functions, Equation, and Relations)*** ❖ Factoring Quadratics ❖ Solving quadratics by taking square roots ❖ Operations with complex numbers ❖ Finding solutions to quadratic equations and inequalities ❖ Conic form of parabolas ❖ Solving linear and quadratic systems of equations ❖ Solving 3 variable linear systems ❖ Solving systems of linear inequalities **End of grading period: December 21** **Semester Exams: December 18 - 21**

2nd semester (90 days)

3rd Grading Period (42 days)	4th Grading Period (48 days)
Polynomials Functions, Expression, and Equations ❖ Graphing cubic functions ❖ Adding, subtracting, multiplying, factoring and dividing polynomials ***Rational Functions, Expressions, and Equations*** ❖ Inverse variation ❖ Graphing simple rational functions ❖ Adding and subtracting rational expressions ❖ Multiplying and dividing rational expressions ❖ Solving rational equations **End of grading period: March 8**	***Radical Functions, Expressions, and Equations*** ❖ Inverses of quadratic and cubic functions ❖ Proving inverses using composition of functions ❖ Graphing square root and cube root functions ❖ Fitting square root functions to data ❖ Radical expressions and rational exponents ❖ Solving radical equations ***Exponential and Logarithmic Functions and Equations*** ❖ Geometric Sequences ❖ Exponential growth and decay functions ❖ Base *e* ❖ Fitting exponential functions to data ❖ Choosing among linear, quadratic, and exponential models ❖ Defining and evaluating logarithmic functions ❖ Graphing logarithmic functions ❖ Power property of logarithms ❖ Solving exponential and logarithmic equations **End of grading period: May 24** **Semester Exams: May 21 – May 24**