



**Course Title:** Algebra II Applied

**Content Area:** Mathematics

**Grade Level:** 10-12

## Scope and Sequence

**Grade Level:** 10, 11, 12

**Course Introduction:** Algebra II is a continuation of topics from Algebra I, including more complicated equations, non-linear graphing, and algebraic expressions not covered in Algebra I.

Units of Study	Standards	Length of Time	Key Content	Assessment Tools	Scaffolding Strategies (Interventions, Special Education)	Resources & Materials
Expressions and Equations	CC.2.2.HS.D.1 CC.2.2.HS.D.2 CC.2.2.HS.D.8 CC.2.2.HS.D.9	4 weeks	Order of Operations Combining Like Terms Distributive Property Solving 1 var Equations Solving 1 var Inequalities Compound Inequalities Absolute Value Eq, Ineq	- Teacher created assessments (quizzes/tests) - Blackboard	Students are allowed to retest if needed.	- OneNote - Blackboard - Textbook - Kuta Software
Graphing Linear Functions	CC.2.2.HS.D.7 CC.2.2.HS.D.10 CC.2.2.HS.C.1 CC.2.2.HS.C.2 CC.2.2.HS.C.3	4 weeks	Relations, Functions Coordinate System Slope Graphing Linear Equations Writing Linear Equations Linear Inequalities	- Teacher created assessments (quizzes/tests) - Blackboard	Students are allowed to retest if needed.	- OneNote - Blackboard - Textbook - Kuta Software
Systems of Equations	CC.2.2.HS.D.1 CC.2.2.HS.D.7 CC.2.2.HS.D.8 CC.2.2.HS.D.9 CC.2.2.HS.D.10 CC.2.2.HS.C.3 CC.2.2.HS.C.5	4 weeks	Solving Systems of 2 var-Graphing Systems of 2 var-Substitution Systems of 2 var-Elimination Systems of 3 variables Word Problems with Systems	- Teacher created assessments (quizzes/tests) - Blackboard	Students are allowed to retest if needed.	- OneNote - Blackboard - Textbook - Kuta Software

	CC.2.2.HS.C.6					
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Monomial and Polynomial Expressions	CC.2.2.HS.D.1 CC.2.2.HS.D.2 CC.2.2.HS.D.3 CC.2.2.HS.D.4 CC.2.2.HS.D.5	5 weeks	Monomial Exponent Properties Negative Exponents Add, Sub, Mult, and Div Monomials and Polynomials Synthetic Division Factoring	- Teacher created assessments (quizzes/tests) - Blackboard	Students are allowed to retest if needed.	- OneNote - Blackboard - Textbook - Kuta Software
Radical Expressions	CC.2.1.HS.F.1 CC.2.1.HS.F.2 CC.2.1.HS.F.5 CC.2.2.HS.D.1 CC.2.2.HS.D.2	4 weeks	Simplifying Radicals Add, Sub, Mult Radicals Rationalize Denominators Fraction Exponents Radical Equations	- Teacher created assessments (quizzes/tests) - Blackboard	Students are allowed to retest if needed.	- OneNote - Blackboard - Textbook - Kuta Software
Imaginary and Complex Numbers	CC.2.1.HS.F.6 CC.2.2.HS.D.1 CC.2.2.HS.D.2 CC.2.2.HS.D.5	3 weeks	Simplifying Imaginary Numbers Expressions with Complex Num Add, Sub, and Mult Imaginary and Complex Numbers	- Teacher created assessments (quizzes/tests) - Blackboard	Students are allowed to retest if needed.	- OneNote - Blackboard - Textbook - Kuta Software
Quadratic Equations	CC.2.1.HS.F.5 CC.2.1.HS.F.6 CC.2.1.HS.F.7 CC.2.2.HS.D.3 CC.2.2.HS.D.4 CC.2.2.HS.D.5 CC.2.2.HS.D.7 CC.2.2.HS.D.8 CC.2.2.HS.D.9 CC.2.2.HS.D.10 CC.2.2.HS.C.2 CC.2.2.HS.C.3 CC.2.2.HS.C.5 CC.2.2.HS.C.6	5 weeks	Solve Quad Eq by Factoring Solve Quad Eq by Completing the Square Solve Quad Eq by Quadratic Formula The Discriminant Real and Complex Solutions Graphing Quadratic Functions Word Problems	- Teacher created assessments (quizzes/tests) - Blackboard	Students are allowed to retest if needed.	- OneNote - Blackboard - Textbook - Kuta Software



<p style="text-align: center;">Rational Expressions</p>	<p>CC.2.2.HS.D.1 CC.2.2.HS.D.2 CC.2.2.HS.D.3 CC.2.2.HS.D.4 CC.2.2.HS.D.5 CC.2.2.HS.D.6</p>	<p>3 weeks</p>	<p>Restricted Values Simplifying Rational Expressions Mult and Div Rational Expressions Common Denominators Add, Sub Rational Expressions</p>	<p>- Teacher created assessments (quizzes/tests) - Blackboard</p>	<p>Students are allowed to retest if needed.</p>	<p>- OneNote - Blackboard - Textbook - Kuta Software</p>
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