



Hansen Jr/Sr High School Curriculum Map

Algebra II

Mr. Rife

Course Overview (Learning Outcomes)

Week	Unit/Chapter/Topics	Resources	Standards
1	Entrance Exam, Pre-Test	Textbook, Online workbook	
2-4	Chapter 1- Expressions, Equations, and Inequalities <ul style="list-style-type: none">• Patterns and Expressions• Properties of Real Numbers• Algebraic Expressions• Solving Equations• Solving Inequalities		HSA.CED.A.2 HSA.CED.A.3 HSA.REI.C.6 HSF.BF.A.1.A
5-7	Chapter 2 – Functions, Equations, and Graphs		HSA.REI.C.6 HSA.CED.A.3

	<ul style="list-style-type: none"> • Relations and Functions • Direct Variation • Linear Functions and Slope-Intercept Form • Families of Functions • Two-Variable Inequalities • Absolute Value Functions and Graphs 		HSA.REI.C.5 HSA.REI.D.12 HSA.CED.A.2
7-10	Chapter 3 – Linear Systems <ul style="list-style-type: none"> • Solving Using Tables and Graphs • Solving Algebraically • Systems with Three Variables 		HSF.IF.B.4 HSF.IF.B.6 HSF.IF.C.7 HSF.LE.A.2 HSA.REI.C.6
11-13	Chapter 4 – Quadratic Functions and Equations <ul style="list-style-type: none"> • Quadratic Functions and Transformations • Standard Form of a Quadratic Function • Quadratic Equations • Completing the Square • The Quadratic Formula 		HSA.CED.A.2 HSF.IF.B.6 HSF.BF.B.3 HSF.IF.7.A HSF.LE.A.3 HSA.A.REI.D.10
14-16	Chapter 5 – Polynomials and Polynomial Functions <ul style="list-style-type: none"> • Polynomial Functions • Solving Polynomial 		HSF.IF.B.4 HSF.IF.B.6 HSF.IF.C.7.C HSA.APR.A.1

	<p>Equations</p> <ul style="list-style-type: none"> • Dividing Polynomials • The Binomial Theorem • Transforming Polynomial Functions 		<p>HSF.IF.C.9 HSF.BF.B.3</p>
17-19	<p>Chapter 6 –Radical Functions and Rational Exponents</p> <ul style="list-style-type: none"> • Roots and Radical Expressions • Binomial Radical Expressions • Rational Exponents • Inverse Relations and Functions 		<p>HSN.RN.A.1 HSN.RN.A.2 HSA.REI.A.1 HSA.SSE.A.1 HSF.IF.B.4 HSA.REI.A.2 HSF.BF.B.4 HSF.BF.B.4.A</p>
20-22	<p>Chapter 7 – Exponential and Logarithmic Functions</p> <ul style="list-style-type: none"> • Exploring Exponential Models • Logarithmic Functions as Inverses • Properties of Logarithms • Natural Logarithms 		<p>HSF.IF.B.4 HSF.IF.B.5 HSF.IF.C.7.E HSR.IF.C.9 HSF.LE.B.5 HSS.ID.B.6.A</p>
23-26	<p>Chapter 8 – Rational Functions</p> <ul style="list-style-type: none"> • Inverse Variation • Rational Functions and Their Graphs • Rational Expressions • Solving Rational Equations 		<p>HSA.CED.A.2 HSF.IF.C.7.D HSF.BF.B.3 HSA.APR.D.6 HSA.REI.D.11 HSA.REI.B.3</p>

<p>27-29</p>	<p>Chapter 9 – Sequences and Series</p> <ul style="list-style-type: none"> ● Mathematical Patterns ● Arithmetic Sequences ● Geometric Sequences ● Arithmetic Series ● Geometric Series 		<p>HSA.SSE.B.4 HSF.IF.A.3 HSF.BF.A.1 HSF.BF.A.1.A HSF.BF.A.2 HSF.LE.A.2</p>
<p>30-33</p>	<p>Chapter 10 – Quadratic Relations and Conic Sections</p> <ul style="list-style-type: none"> ● Conic Sections ● Parabolas ● Circles ● Ellipses ● Hyperbolas 		<p>HSA.SSE.A.2 HSA.SSE.B.3 HSG.GPE.A.2 HSA.REI.C.7 HSG.GPE.A.2 HSG.GPE.A.3</p>
<p>34-35</p>	<p>Chapter 11 – Trigonometric Identities and Equations</p> <ul style="list-style-type: none"> ● Trigonometric Identities ● Solving Using Inverse ● Right Triangles and Trig Ratios ● Area and the Law of Sines ● The Law of Cosines 		<p>HSF.BF.B.4.D HSF.TF.B.6 HSF.TF.B.7 HSG.SRT.D.10 HSG.SRT.D.11 HAS.SSE.A.2 HSF.TF.A.3 HSF.TF.A.4 HSF.TF.C.9</p>