Course Name/Number: Honors Algebra II
Grade Level: Sophomore/Junior

Curriculum Map

Unit	Essential Questions	Standards & Skills	Common Assessments	Learning Activities	Resources/Technology	Unit Reflection
Name: Equations, and Inequalities **Quarter:** 1 **Length (Days):** 8	1. Using number lines to graph and order real numbers 2. Identify properties of real numbers 3. Use properties of real numbers 4. Solve linear equations 5. Solve simple linear inequalities 6. Solve compound inequalities 7. Find the slopes of lines 8. Classify lines as parallel, perpendicular, or neither based on slope 9. Graph linear inequalities in two variables	**CCSS:** A.SSE.1 A.SSE.2 A-APR.1 A-CED.1 A-CED.2 A-CED.3 A-CED.4 A-REI.1 A-REI.2 A-REI.3 A-REI.10 A-REI.12 **MP1** **MP2** **MP4** **MP5** **MP6**	**Formative:** **Homework:** pp. 7, 8: 1-41 eoo pp. 22, 23; 17-41 odds pp. 45, 46; 13-47 odds pp. 79, 80; 1-43 odds pp. 111, 112; 1-43 odds Chapter 1,2 Review Packet **Summative:** Chapter 1, 2 Test	Group work, Lecture, Teach-model-try, individual instruction as needed	Star Board, graphing calculators, Geometer's Sketchpad Software, note outlines, text book, and related handouts	This unit is the first of the school year and serves as review. It works as an excellent tool to reengage students into the math curriculum and allows me to assess the ability of each student on concepts they should have already learned. There are a wide variety of standards covered in this unit. Many of them are Algebra I standards that are reviewed.
Name: Systems of Linear Equations and Inequalities **Quarter:** 1 **Length (Days):** 9	1. graph and solve systems of linear equations in two variables 2. Use algebraic methods to solve linear systems. 3. Solve systems of linear equations in three variables	**CCSS:** A-REI.5 A-REI.6 A-REI.10 A-REI.11 **MP1** **MP2** **MP4** **MP5** **MP6**	**Formative:** **Homework:** pp. 142, 143; 1-29 and 41-51 odds p. 52; 11-21 odds pp. 152, 153; 23-47 eoo p. 160, 27-49 oods p. 182; 24, 26, 30, 32 Chapter 3 Review Packet **Summative:** Chapter 3 Test	Group work, Lecture, Teach-model-try, individual instruction as needed	Star Board, graphing calculators, Geometer's Sketchpad Software, note outlines, text book, and related handouts	This unit concludes the review portion of the year and extends concepts further than they had been covered I previous courses. Once again, there are a wide variety of standards covered in this unit. Many of them are Algebra I standards that are reviewed.

Name: Matrices and Determinants **Quarter:** 1 **Length (Days):** 12	1. Add and subtract matrices 2. Multiply matrices by scalars 3. Solve matrix equations. 4. Multiply matrices 5. Evaluate the determinant of 2x2 and 3x3 matrices 6. Use Cramer's rule to solve systems of linear equations 7. Find and use inverse matrices 8. Solve systems of linear equations using inverse matrices	**CCSS:** N-VM.6 N-VM.7 N-VM.8 N-VM.9 N-VM.10 A-REI.9 **MP1** **MP2** **MP4** **MP5** **MP6**	**Formative:** **Homework:** pp. 203, 204; 1-35 odds pp. 211, 212; 1-33 eoo pp. 211, 212; 2-34 eoe p. 218; 13-29 odds p. 219; 37-53 odds pp. 227, 228; 13-23 odds, 33, 35 pp. 233, 234; 23-39 odds Chapter 4 Review Packet **Summative:** **1.** Chapter 4 Test 2. Matrix coding alternative assessment	Group work, Lecture, Teach-model-try, individual instruction as needed	Star Board, graphing calculators, Geometer's Sketchpad Software, note outlines, text book, and related handouts	This is the first unit that introduces a topic the students have never covered before. It allows students to take old concepts and apply them in new ways. Almost all of the standards related to matrices are covered in this unit. The only matrix standards that are not covered are related to vectors. To address these standards and other standards related to vectors, a unit on vectors may have to be added to the curriculum.
Name: Quadratic Functions **Quarter:** 1/2 **Length (Days):** ? (Still going)	1. Graph Quadratic Functions 2. Factor quadratic expressions 3. Solve quadratic equations by factoring 4. Solve quadratic equations by finding squarer roots 5. Solve quadratic equations with complex solutions 6. Perform operations with complex umbers 7. Solve quadratic equations by completing the square 8. Solve quadratic equations using the quadratic formula 9. Use the discriminant to determine the nature	**CCSS:** N-CN.1 N-CN.2 N-CN.3 N-CN.7 N-CN.8 N-CN.9 A-SSE.a A-SSE.b A-APR.3 A-REI.4 A-REI.7 A-APR.5 **MP1** **MP2** **MP4** **MP5** **MP6** MP7 MP8	**Formative:** **Homework:** pp. 253, 254; 20-48 eoo pp. 260, 261; 25-77 eoo pp. 267, 268; 19-67 eoo pp. 277, 278; 17-67 eoo pp. 277, 278; 18-70 evens **Summative:** Chapter 5 Test	Group work, Lecture, Teach-model-try, individual instruction as needed	Star Board, graphing calculators, Geometer's Sketchpad Software, note outlines, text book, and related handouts	This unit introduces to graphs of equations that are not linear. It also reintroduces and extends concepts that were introduced in Algebra I. With respect to the standards, almost all of the standards in the complex number system family are addressed. The standards that are not addressed are related to the complex number plane. The concept of the complex number plane is introduced in this unit, but it will have to be expanded to

	of the solutions to a quadratic equation 10. Graph inequalities in two variables					include all of the standards in this family.