**Tentative Instructional Outline - MATH 1314**

|  |  |  |
| --- | --- | --- |
| **Date** | **Section** | **Material** |
| Week 1 | 1.1  1.2  1.3 | Linear Equations and Rational Equations  Applications and Modeling with Linear Equations  Complex Numbers |
| Week 2 | 1.4  1.5  1.6 | Quadratic Equations Applications of Quadratic Equations More Equations and Applications |
| Week 3 | 1.7  1.8 | Linear Inequalities and Compound Inequalities  Absolute Value Equations and Inequalities  **Test 1 (Sections 1.1 – 1.8)** |
| Week 4 | 2.1  2.3  2.4 | The Rectangular Coordinate System and Graphing Utilities  Functions and Relations  Linear Equations in Two Variables and Linear Functions |
| Week 5 | 2.5  2.6  2.7 | Applications of Linear Equations and Modeling  Analyzing Graphs of Functions and Piecewise-Defined Functions  Transformations of Graphs |
| Week 6 | 2.8  3.1 | Algebra of Functions and Function Composition  Quadratic Functions and Applications |
| Week 7 | 3.2  3.5  3.6 | Introduction to Polynomial Functions  Rational Functions  Polynomial and Rational Inequalities |
| Week 8 | **Test 2 (Sections 2.1, 2.3-2.8, 3.1-3.2, 3.5-3.6)** | |
| Week 9 | 4.1  4.2  4.3 | Inverse Functions  Exponential Functions  Logarithmic Functions |
| Week 10 | 4.4  4.5  4.6 | Properties of Logarithms  Exponential and Logarithmic Equations  Modeling with Exponential and Logarithmic Equations |
| Week 11 | **Test 3 (Sections 4.1-4.6)** | |
| Week 12 | 5.1  5.2  5.4 | Systems of Linear Equations in Two Variables and Applications  Systems of Linear Equations in Three Variables and Applications  Systems of Nonlinear Equations in Two Variables |
| Week 13 | 5.5  6.1  6.2 | Inequalities and Systems of Inequalities in Two Variables  Solving Systems of Linear Equations Using Matrices  Inconsistent Systems and Dependent Equations |
| Week 14 | **Test 4 (Sections 5.1-5.2, 5.4-5.5, 6.1-6.2)** | |
| Week 15 | *Review for Final* | |