## Math 212 Beginning Algebra

## Textbook: Woodbury Intermediate Algebra a STEM Approach $1^{\text {st }}$ Edition

The following sections should be covered:

| Section | Title | Notes |
| :--- | :--- | :--- |
| 1.1 | Introduction to Algebra | Review as Needed |
| 1.2 | Linear Equations | Review as Needed |
| 1.3 | Problem solving: Applications of Linear Equations | Review as Needed |
| 1.6 | Linear inequalities in one variable | Solving compound inequalities <br> is not required until Math 114 |
| 2.1 | The Rectangular Coordinate System; Equations in Two <br> Variables |  |
| 2.2 | Slope of a Line |  |
| 2.3 | Equations of Lines | Linear Inequalities (in two variables) <br> 2.4 |
| 2.5 | Linear functions | Difference quotients and <br> horizontal/vertical shifts of <br> linear functions aren't required |
| 3.1 | Systems of Two Equations in Two Unknowns | Select desired applications |
| 3.2 | Applications of Systems of Equations | Only quadratic polynomials <br> are required |
| 3.3 | Systems of Linear Inequalities | Only quadratic polynomials <br> are required |
| 4.3 | Polynomials: Addition, Subtraction, and Multiplication of <br> Polynomials | Objective 6, factoring <br> polynomials of more than one <br> variable is not required |
| 4.5 | And Introduction to Factoring: The Greatest Common Factor; <br> Factoring by Grouping | Difference of squares only |
| 4.6 | Factoring Trinomials of Degree Two | Objectives 1 and 3 only <br> 4.7 |
| 4.9 | Factoring Special Binomials | Objective 1 only, and only for <br> simplifying the square root of <br> an integer |
| 6.1 | Square Roots; Radical Notation | Objective 1 is required, <br> objectives 2-7 are optional |
| 6.3 | Simplifying radical expressions | Optional |
| 7.2 | The Complex Numbers <br> The Quadratic Formula <br> Completing the Square | Select desired applications |
| 7.5 | Applications using Quadratic Equations | Guatic Functions |

