## Math 212 Beginning Algebra

## Textbook: Blitzer, Intermediate Algebra for College Students $7^{\text {th }}$ Edition

The following sections should be covered:

| Section | Title | Notes |
| :---: | :---: | :---: |
| 1.1-1.5 | Linear equations, Graphing equations, Solving Linear equations, Problem solving and using formulas | Review as needed |
| 2.1 | Introduction to functions |  |
| 2.2 | Graphs of functions |  |
| 2.3 | The algebra of functions | Finding the domain of a function only; algebra of functions is not required |
| 2.4 | Linear functions and slope |  |
| 2.5 | Point-slope form of the equation of a line | Perpendicular lines not required |
| 3.1 | Systems of linear equations in two variables |  |
| 3.2 | Applications of systems of equations | Select desired applications |
| 4.1 | Solving linear inequalities |  |
| 4.4 | Linear inequalities in two variables |  |
| 5.1 | Introduction to polynomials and polynomial functions | Only quadratic polynomials are required, end behavior of polynomials and leading coefficient test are not required |
| 5.2 | Multiplication of polynomials | Only quadratic polynomials are required |
| 5.3 | Greatest common factors and factoring by grouping | Only quadratic polynomials are required, factoring by grouping is not required but may be useful for factoring trinomials later |
| 5.4 | Factoring trinomials | Only factoring quadratic polynomials is required |
| 5.5 | Factoring Special Forms | Difference of perfect squares only |
| 5.6 | A general factoring strategy | Only factoring quadratic polynomials is required |
| 5.7 | Polynomial equations | Only quadratic equations |
| 7.1 | Radical expressions and functions | Only square roots of numbers |
| 7.3 | Multiplying and simplifying radical expressions | Only simplifying square roots of numbers |
| 8.1 | The square root property and completing the square | Optional |
| 8.2 | The quadratic formula |  |
| 8.3 | Quadratic functions and their graphs | Select desired applications |
| 11.1 | Sequences and summation notation |  |
| 11.2 | Arithmetic sequences |  |

