

# Study Materials for Math 20 & 30

## Background

Math 20 is a developmental course that covers the following topics:

|    |   |
|----|---|
| 1. | Real Number System (fractions, decimals, percents, ratios, etc.)          |
| 2. | Solving Linear Equations and Inequalities                                 |
| 3. | Applications of Algebra (application problems involving linear equations) |
| 4. | Graphing Linear Equations   |
| 5. | Solving Systems of Linear Equations and Inequalities                      |

Here are some online resources for these topics:

| <b>Source</b>   | <b>Content Areas</b>                     |
|---|--|
| Kahn Academy ( <a href="http://www.kahnacademy.org">www.kahnacademy.org</a> ) | Algebra 1 Course, Units 1-7              |
| Openstax ( <a href="http://openstax.org">openstax.org</a> )                   | Elementary Algebra 2e text, Chapters 1-5 |

Some majors on campus require students to complete College Algebra or higher for the degree. These majors include: Computer Information Science, Biology, Nursing, Engineering Technology, etc. In addition to the Math 20 course above, students on this track will need to complete Math 30 Intermediate Algebra before being allowed to enroll in the required College Algebra course. Math 30 covers the following topics:

|    |                                      |
|----|--------------------------------------|
| 1. | Exponents and Polynomials            |
| 2. | Factoring Polynomials                |
| 3. | Rational Expressions and Equations   |
| 4. | Roots, Radicals, and Complex Numbers |
| 5. | Solving Quadratic Equations          |

Here are some online resources for these topics:

| <b>Source</b>   | <b>Content Areas</b>                          |
|---|---|
| Kahn Academy ( <a href="http://www.kahnacademy.org">www.kahnacademy.org</a> ) | Algebra 2 Course, Units 1-6, 10               |
| Openstax ( <a href="http://openstax.org">openstax.org</a> )                   | Intermediate Algebra 2e text, Chapters 1, 5-9 |