## **Math 114 Intermediate Algebra**

## **Textbook: Blitzer, Intermediate Algebra for College Students 7<sup>th</sup> Edition** The following sections should be covered:

| Section | Title  | Notes                         |
|---------|--|-------------------------------|
| 1.2     | Operations with real numbers and simplifying algebraic       | Only the "Geometric meaning   |
|         | expressions  | of absolute value" is needed  |
|         |  | from this section             |
| 1.6     | Properties of Integral exponents                             |                               |
| 1.7     | Scientific notation  |                               |
| 4.1     | Solving linear inequalities                                  | Review as needed              |
| 4.2     | Compound inequalities  |                               |
| 4.3     | Equations and inequalities involving absolute value          |                               |
| 5.3-5.6 | Factoring  | Review as needed              |
| 6.1     | Rational expressions and functions: multiplying and dividing |                               |
| 6.2     | Adding and subtracting rational expressions.                 |                               |
| 6.3     | Complex rational fractions                                   |                               |
| 6.6     | Rational equations   |                               |
| 6.7     | Formulas and applications of rational equations              | Select desired applications   |
| 7.1     | Radical expressions and functions                            |                               |
| 7.2     | Rational exponents   |                               |
| 7.3     | Multiplying and simplifying radical expressions              |                               |
| 7.4     | Adding subtracting, and dividing radical expressions         |                               |
| 7.5     | Multiplying more than one term and rationalizing             |                               |
|         | denominators   |                               |
| 7.6     | Radical equations  |                               |
| 9.1     | Exponential functions  |                               |
| 9.2     | Composite and inverse functions                              | Relation of composition to    |
|         |  | inverse functions is optional |
| 9.3     | Logarithmic functions  |                               |
| 9.4     | Properties of logarithms                                     |                               |
| 9.5     | Exponential and logarithmic equations                        |                               |
| 9.6     | Exponential growth and decay                                 | Select desired applications   |
| 10.1    | Distance and midpoint formulas: Circles                      |                               |
| 11.1    | Sequences and summation notation                             | Review as needed              |
| 11.3    | Geometric sequences and series                               | Sums of infinite series are   |
|         | 1  | optional                      |