Course Description: This course introduces students to the basic concepts of algebra. Students will simplify or perform operations on signed numbers, radicals, polynomials, and expressions containing exponents; factor polynomials; solve and graph linear equations and inequalities in one variable; solve related applications.

Prerequisites: Satisfactory Completion of MAT 0002 or placement test scores.

Credits: 4 (6 contact hours lecture/lab)

Course Competencies:

Competency 1: The Student will demonstrate knowledge of real numbers by:
   a. Performing operations of addition, subtraction, multiplication, and division on real numbers.
   b. Applying the order of operations agreement on real numbers.
   c. Recognizing and applying the commutative, associative, identity, inverse, and distributive properties of real numbers.
   d. Evaluating and interpreting absolute value

Competency 2: The Student will demonstrate knowledge of algebraic expressions by:
   a. Evaluating algebraic expressions.
   b. Simplifying expressions.

Competency 3: The Student will demonstrate knowledge of polynomial by:
   a. Using properties of exponents to simplify exponential expressions.
   b. Performing the operations of addition, subtraction, multiplication on polynomials.
   c. Dividing a polynomial by a monomial.

Competency 4: The Student will demonstrate knowledge of scientific notation by:
   a. Converting decimal notation to scientific notation and scientific notation to decimal notation.
   b. Multiplying and dividing numbers that are in scientific notation.

Competency 5: The Student will demonstrate knowledge of linear equations by:
   a. Solving linear equations in one variable.
   b. Solving linear equations with one variable that have no solution.
   c. Solving linear equations with one variable that have an infinite number of solutions.
   d. Solving applications involving linear equations including proportions.
   e. Solving literal equations.