

## Math 015 Course Objectives

### Demonstrate Number Sense.

- Perform fraction and integer operations by hand and with calculator.
- Convert between fractions and decimals.
- Identify place values and use rounding and estimation.
- Apply properties of integer exponents, including scientific notation, identify perfect squares and calculate square roots.
- Using order of operations, apply proportional reasoning and solve percent and proportion problems.
- Convert within and between the US customary and Metric system using dimensional analysis.

### Demonstrate Algebraic Sense.

- Evaluate expressions and formulas, Simplify expressions.
- Solve linear equations and literal equations, add, subtract, and multiply polynomial expressions

### Demonstrate Geometric Sense.

- Calculate circumference of a circle and perimeter of any 2-dimensional figure.
- Calculate area of a triangle, rectangle, square, and circle. Calculate volume of a rectangular prism, cylinder and cube.

### Demonstrate Graphing Sense.

- Solve inequalities in one variable and graph on a number line.
- Read and interpret tables, line graphs, bar graphs, and circle graphs.
- Demonstrate an understanding of and use the concept of slope.
- Graph linear equations using t-tables, intercepts, and slope-intercept form.
- Write linear equations in slope-intercept form given slope and y-intercept or given two points.

### Demonstrate Competence in Mathematical Language

- Translate verbal expressions into algebraic symbols and vice-versa, use relevant mathematical language, laws, and notations appropriately.
- Define variables in applications

### Solve a variety of application problems in the above areas

### Apply the use of appropriate computer technology in order to be successful in the course.

- Demonstrate proficient use of email, MyMathLab, and Blackboard technologies.
- Use a scientific calculator proficiently as related to coursework.