Course Number:  MATH 1075

Course Name:  Intermediate Algebra

Prerequisite:
DEV 0115 with a grade of “C” or higher or MATH 1099 (DEV 0115 modules) or placement by COMPASS.

Description of the Course:
Second of a two-semester sequence. Includes the study of rational expression arithmetic and simplification and complex fraction simplification; operations on radical expressions and expressions containing rational exponents; the complex number system; solving absolute value, rational, radical, and quadratic equations; solving absolute value and polynomial inequalities in one variable; solving compound inequalities in one and two variables; graphs, relations, and functions including quadratic functions; the distance and midpoint formulas and circles. Includes applications and activities to build skills in problem solving.

Goals of the Course:
To improve the student’s algebra and problem solving abilities. To prepare students (many of whom plan to take more mathematics) for further study in mathematics.

Required Textbooks and Equipment:
• Do the Math Workbook
• MyMathLab electronic learning environment
• Texas Instruments’ TI-83, TI-83PLUS, TI-84, or TI-84 PLUS Graphing Calculator

Units of Instruction:
Textbook sections 7.1 – 7.8, 8.1 – 8.8, 9.1 – 9.9, 10.1 – 10.6, 12.1 – 12.2

Instructional Methods:
Individual and group student exploration and discovery exercises, guided questioning and discussion, demonstration of multiple methods, and lecture using examples and counterexamples.