

**Course Number:** MATH 104

**Course Name:** Intermediate Algebra

**Prerequisite:**

**MATH 103 with a grade of “C” or higher, or placement by COMPASS**

**Description of the Course:**

This course is a remedial preparatory course designed to improve the student’s algebra and problem solving abilities. The course includes: interval notation; absolute value, rational, radical and quadratic equations; absolute value and polynomial inequalities in one variable; linear inequalities in two variables; compound inequalities in one and two variables; operations on radical expressions and expressions containing rational exponents; complex number system introduction; and applications and modeling. These topics are taught using an approach that integrates algebraic, graphic and numeric methods wherever possible.

**Goals of the Course:**

To improve the student’s algebra and problem solving abilities. To prepare students (most of whom plan to take MATH 148, MATH 116, or MATH 130) for further study in mathematics.

**Required Textbooks and Equipment:**

Intermediate Algebra, A Graphing Approach, Martin-Gay/Greene, Prentice Hall, 4<sup>th</sup> Edition, 2008

Texas Instruments’ TI-83 or TI-84 Graphing Calculator

**Instructional Methods:**

Lecture, discussion, individual or collaborative activities, and discovery/exploration activities, all of which regularly incorporate the use of TI-Graphing Calculator as either a problem solving tool, an exploration tool, or a verification tool.

**Units of Instruction:**

Textbook sections 3.2–3.6, 6.5–6.7, 7.1–7.7, 8.1–8.7