

Course Number: MATH 107

Course Name: Condensed Algebra I

Prerequisite:

DEV 031 with a grade of “A” or placement by COMPASS

Description of the Course:

This course is intended for those students who need a quicker review of algebra than provided in MATH 102 and 103.

This course is a remedial preparatory course designed to improve the student’s algebra and problem solving abilities. The course includes: the real number system; order of operations; simplifying expressions; solving linear equations and inequalities in one variable; applications and modeling; overview of graphing; linear equations in two variables; relations and functions; compound inequalities in one and two variables; absolute value equations and inequalities in one variable; linear inequalities in two variables; systems of equations in two variables; properties of exponents; scientific notation; and polynomial arithmetic. These topics are taught using an approach that integrates algebraic, graphic and numeric methods whenever possible.

Goals of the Course:

To meet the needs of students who have successfully completed two years of high school algebra, but have been away from the topics long enough that they need a fast-paced review of algebra topics. This course represents further development in concepts above the remedial level and below the college algebra level. To improve the student’s algebra and problem solving abilities. To prepare students for further study in mathematics. MATH 107 does NOT fulfill the requirements for MATH 103.

Required Textbooks and Equipment:

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

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

Units of Instruction:

Textbook sections 1.1–1.8, 2.1–2.6, 3.1–3.6, 4.1, 4.3, 5.1–5.4

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.