

Course Number: MATH 110

Course Name: Condensed Algebra II

Prerequisite: MATH 107 with a grade of “C” or higher, 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 103 and 104. This course is a continuation of MATH 107. This course is a remedial preparatory course designed to improve the student’s algebra and problem solving abilities. The course includes: properties of exponents; scientific notation; polynomial arithmetic, factoring and equation solving; rational expression arithmetic and simplification; complex fraction simplification; rational, radical and quadratic equations; polynomial inequalities in one variable; 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 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 5.1–5.8, 6.1–6.7, 7.1–7.7, 8.1–8.7

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.