



Division:	Science/Mathematics	Area:	Mathematics
Course Number:	MATH 157	Course Name:	College Algebra
Prerequisite:	MATH 151 or two years high school algebra and one year high school geometry		
Corequisite:	NONE		
Hours Required:	Class: 45	Lab: 0	Credits: 3 (three)

Course Description/Purpose

This course covers the topics of polynomial equations, inequalities, exponential equations and logarithmic equations. Also included are systems of equations and complex numbers. The purpose of this course is to introduce students to college level mathematics at a more gradual pace than MATH 164. MATH 157 and MATH 159 are the equivalent of MATH 164.

Major Units

- Algebra Review
- Graphs and Technology
- Functions and Graphs
- Polynomial Functions
- Exponential and Logarithmic Functions
- Systems of Equations and Inequalities

Educational/Course Outcomes

Student learning will be assessed by a variety of methods, including, but not limited to, quizzes and tests, journals, essays, papers, projects, laboratory/clinical exercises and examinations, presentations, simulations, portfolios, homework assignments, and instructor observations.

Cognitive Each student will be expected to *Identify/Recognize*. . .

- polynomial, exponential and logarithmic functions.

Performance Each student will be expected to *Demonstrate/Practice*. . .

- determine the solution set of linear and quadratic equations and inequalities algebraically and with a graphing calculator;
- graph polynomial and rational functions with or without a graphing calculator;
- solve equations and inequalities involving third and fourth degree polynomials algebraically and with a graphing calculator;
- solve equations involving exponential or logarithmic functions algebraically and with a graphing calculator;
- solve systems of equations and inequalities algebraically and with a graphing calculator;
- apply matrix theory to solve systems of equations algebraically and with a graphing calculator.

Rev. 6/02: VM/lj