



Division: Science/Mathematics **Area:** Mathematics
Course Number: MATH 151 **Course Name:** Intermediate Algebra
Prerequisite: MATH 150 or qualifying score on ACT or COMPASS test
Corequisite: NONE
Hours Required: **Class:** 60 **Lab:** 0 **Credits:** 4 (four)

Course Description/Purpose

This course covers properties of real numbers, solutions of first- and second-degree polynomial equations and inequalities, systems of equations and their graphs, basic properties of logarithms, complex numbers, basic right triangle trigonometry and laws of sines and cosines. The purpose of this course is to prepare students for the transition to college algebra.

Major Units

- Relations and Functions
- Systems of Linear Equations
- Roots and Radicals
- Quadratic Equations
- Exponential and Logarithmic Equations
- Conic Sections
- Trigonometry

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*. . .

- rational exponents;
- quadratic formula;
- conic sections;
- exponential and logarithmic functions;
- systems of equations;
- trigonometric relationships.

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

- basic operations with real numbers;
- solve linear and rational equations;
- solve quadratic equations;
- evaluate exponential and logarithmic expressions;
- evaluate expressions with rational exponents and radicals;
- compute roots of real numbers;
- compute angles and sides of right triangles.