

SU DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE
SYLLABUS (Tentative)
MATH 135 College Algebra

Objective: To develop students' problem solving skills using techniques of algebra through numeric, analytic, graphical, and symbolic approaches. Emphasis is placed on development of skills in applying algebraic techniques, critical thinking, and working in teams, using graphing calculators, and communicating effectively both orally and in writing.

Intended for: Students interested in improving their algebraic and problem-solving skills in preparation for taking courses in statistics, applied calculus, or science; or for students seeking a quantitative course in general education.

Prerequisite: High school Algebra I and II.

Text: "College Algebra, "by Julie Miller, 2nd edition.

Calculator: A TI 83+, or an equivalent graphing calculator, is required.

Topics	Weeks
Review	
Review of algebraic fundamentals, applications	1.5
Equations	
Basic equations, modeling	1.5
Coordinates and Graphs	
Graphing, linear equations, modeling	1.5
Functions	
Functional notation, graphs, equations, average rate of change, transformations, combining, modeling	2.0
Polynomial and Rational Functions	
Quadratic, polynomial, rational functions, modeling	2.0
Exponential and Logarithmic Functions	
Exponential and logarithmic functions, laws of logarithms, modeling	2.0
Systems of Equations	
Systems of equations in two variables, modeling	2.0
Tests, Review, or Optional Topics	
Inequalities, systems of equations in several variables	2.0

EVALUATION

Graded written assignments and quizzes 0% - 35%

In-term Tests 35% - 75%

Final Exam 20% - 35%

Clear descriptions of thought processes, evidence of critical thinking, and effective communication must be demonstrated in written work.

Free tutoring is available for this course in the Spring and Fall semesters.

NOTE: Once a student has received credit, including transfer credit, for a course, credit may not be received for any course with material that is equivalent to it or is a prerequisite for it.