

**SU DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE
SYLLABUS (Tentative)**

MATH 100/135 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, 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 Stewart, Redlin and Watson Brooks/Cole Publishing, 2009.

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

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

EVALUATION

Graded written assignments and quizzes	0% - 35%
Two or Three Tests	35% - 75%
Final Examination	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.