

# MATH 130 OUTLINE

## COLLEGE ALGEBRA

TEXT: College Algebra, 9th Edition, Lial/Hornsby/Schneider

Approved: APRIL 2006

Effective: FALL 2006

MATERIAL TO BE COVERED	SECTIONS FROM TEXT	TIME LINE
Applications of linear equations, quadratic equations and applications, radical, rational and quadratic-in-form equations, linear/rational/quadratic inequalities. (Optional: complex numbers.)	1.2 and 1.4 - 1.7 (treat as review) Optional: 1.3	3 Hours
Graphs of equations including circles, functions, linear functions, graphs of basic functions and piecewise-defined functions, graphing techniques, function operations including composition.	2.1 - 2.7	7.5 Hours
Quadratic functions and applications, synthetic division, real and complex zeros of polynomial functions, polynomial functions: graphs and applications; rational functions: graphs and applications; variation.	3.1 - 3.6	10.5 Hours
Inverse functions, exponential functions, logarithmic functions, properties of logarithms, exponential and logarithmic equations and applications.	4.1 - 4.6	7.5 Hours
Linear systems: two and three variables and applications, Matrix solution of linear systems, systems of linear inequalities and linear programming, properties of matrices.	5.1 & 5.2 & 5.6 & 5.7	5.5 Hours
Sequences and series, arithmetic and geometric sequences and series, binomial theorem, math induction.	7.1 - 7.5	5.5 Hours

\*\*\* One hour = 1 hour of face time. \*\*\*\*This outline allows for 3 hours of exams.

16 Week Term: 1 week = 2.8333 hours (face time) 6 Week Term: 1 week = 7.5 hours (face time)

It is highly recommended that the instructor assign the summary exercises found in the middle of each chapter.

**\*\* See reverse side for important Department Policy\*\***

Submitted by: Adcox, Butler, Parra, Sorcabal, Takashima, Tran.