Math 1601 Introduction to Higher Mathematics

Math 1601 is not taught on a regular basis and is currently inactive.

Honors Calculus I

Department: MATH
Course Number: 1511
Hours - Lecture: 3
Hours - Lab: 0
Hours - Recitation: 2
Hours - Total Credit: 4
Typical Scheduling: no regular schedule (last offered in Fall 2006)
Description:
Differential calculus and basic integral calculus including the fundamental theorem of calculus, including the underlying theory of lim
and sequences.
Prerequisites:

SAT Mathematics 700 or Converted ACT Math 700 or Undergraduate Semester level MATH 1501 Minimum Grade of D

Course Text:

At the level of *Calculus, one and several variables,* tenth edition, by Salas, Hille, and Etgen, John Wiley and Sons, Inc., 2007

Topic Outline:

Topic	Text Sections	Lectures
Review of functions, graphs, inequalities and other basic notions	1.1-1.8	2
Limits and continuity	2.1-2.6	4
Differentiation: Computing derivatives	3.1-3.7	7
Limits of sequences and the exponential function	11.1-11.4	3
Minimum-maximum problems, applications of the derivative and curve sketching	4.1-4.10, 4.11	6
Integration and the fundamental theorem of calculus	5.1-5.9	6
Applications of integration	6.1-6.6	5
Transcendental functions	7.1-7.7	4
Techniques of integration	8.1-8.5	4
Complex numbers	Web Notes	3