

MTHT 466

Fall 2010

Introduction to Calculus and the Graphing Calculator

Instructor: Bonnie Saunders, 622 SEO, saunders@math.uic.edu, (312) 413-1417
Webpage: www.math.uic.edu/~saunders/

Office Hours: after class Monday and Thursday

Class times and location: 3:00 PM - 3:50 PM MWRF -- 600 SEO

Description:

This is a concepts-based course in integral and differential calculus with applications to teaching middle school mathematics, particularly 8th grade algebra. The graphing calculator will be used extensively to promote understanding of the concepts.

Required Materials:

Problems and Notes for MTHT466 is available online at www.math.uic.edu/~saunders/

TI-84 or TI-84 Plus Graphing Calculator or TI-83. TI-85 or TI-86 will suffice. Other graphing calculators will require extra work on your part for writing the programs we will be using. The *TI-84 Plus Graphing Calculator Guidebook* is available online at http://education.ti.com/educationportal/sites/US/productDetail/us_ti84p.html

Supplemental texts:

Hughes-Hallett, et al., *Calculus, Single Variable*, second Edition, Wiley. We do not follow the book but several sections will be copied. There are copies available for use in the classroom.

Beckmann, *Mathematics for Elementary Teachers*, Second Edition. You should have this book available for review problems.

Sallee and Saunders, *Workshop Geometry*. If you do not have your own copy from Math 141, it is online at http://www2.math.uic.edu/~saunders/workshop_geometry.html. You will not need to print the whole thing. It will be used for review problems.

Educational Development Center, CME Project, *Algebra I*, Pearson

Grades: Grades are based on five parts:

30% Homework, attendance and participation is assigned and collected daily. Each student is expected to present some of the homework problems to the class. Every week each student will receive a grade for homework and participation. *Every class time* a student will leave some work in a group folder which will be evaluated for this grade. It is not possible to make-up these grades later.

20% Midterms. Two midterms are currently scheduled for Friday, October 8 and Friday, October 29.

20% Group teaching project

30% Final Exam -- Monday, December 6, 8:00-10:00