Math 231 Section EE1/EB1 (Active Learning)
Fall 2006

Instructor: Prof. Robert Muncaster, muncast@uiuc.edu

Office Location: 273 Altgeld Hall

Office Phone: 333-1625

Office Hours: By appointment (at the moment)

Lecture Times and Location: MonWedFri 1:00-1:50, 241 Altgeld Hall

Lab Time and Location: Wed 3:00-4:50, 173 Altgeld Hall

Course Text and Equipment: *Calculus from Graphical, Numerical, and Symbolic Points of View*, second edition, by A. Ostebee and P. Zorn (Brooks-Cole, 2002).

A graphing calculator is required for this course. TI calculators (through TI-86) are preferred, but other models are fine.

Make sure to bring the textbook and your calculator to every class!

We will cover part or all of Chapters 6, 7, 8, 9, 10 and 11 of the text, as well Chapter V on Vectors and Polar Coordinates. There will be some extra material not included in the text which I will photocopy and distribute at the appropriate time.

Course web site: http://www.math.uiuc.edu/~muncast/math231/

I will post regular information about the course on the website, including assignments, a schedule of upcoming events, handouts, etc.

Active Learning: This is an Active Learning section in the University's First Year Discovery Program. Class will meet for five hours each week: three hours of short lecture/in-class group work, and a two-hour group lab. Lectures will be brief (15 minutes maximum) and designed merely to introduce key ideas and clear up any misconceptions. The majority of class time will be spent in small groups working on problems.

It is essential that you read the textbook before coming to class! For each class period there will be a reading assignment of 5-10 pages. You will be expected to contribute to the discussion at the beginning of class based on what you have read. I may have occasional short (unannounced) reading quizzes.

The graphing calculator will be a significant learning aid, and you will use it frequently in class, on the homework, and while studying. Use of the calculator on exams will be decided on a case-by-case basis, and announced in advance of the exam.

Class work: You will be assigned to a small group every week. During class you will work on problems in the text with your group members, helping each other where possible. I will also move about the room helping people with solutions.

Homework: will be assigned once a week and it will reflect the problems you are given to solve in class. I will grade a selection of problems from each homework. I will drop your lowest two homework scores.

Lab: Each week there will be a two hour lab. During this time you will work in your group on a more intensive assignment. Each student will turn in the lab assignment, and only one solution to each problem will be graded (not necessarily all from the paper of a single member of the group!).

The entire group will receive the same grade on the lab. I reserve the right to give an individual a lower score than the remainder of the group if his or her participation is deemed insufficient. The lowest lab score will be dropped.

Exams: There will be four one-hour midterm exams, and a final exam. Dates for the midterm exams will be announced later on our website. The final exam is on

Wednesday, December 13 from **1:30 to 4:30 pm** in **241 Altgeld Hall**.

The second hour exam will differ from the other midterm exams and the final exam. It will test your mastery of basic skills essential for success in this and later courses. You must demonstrate mastery of these skills at the 85% level or better in order to pass this exam. If you do not reach 85% the first time, you will have to retake the exam until the 85% level is reached. Repeat exams will be given weekly three additional times. The following penalty applies to repeats: your recorded score for this exam will be reduced by 10 points (out of 100) for each retake that is needed to reach the 85% level. Your recorded grade for this exam will be **zero** if you do not reach the 85% level on one of the retakes. Most students will need at most one retake.

Grading Policy: Grades will be computed according to the following percentages:

- Homework 15%
- Group work (lab) 10%
- Four midterms 10% each
- Final 35%

Final grades for the course may be curved: a score of 90% will guarantee you an A-; 80% will guarantee you a B-.

Policies regarding late assignments: Weekly homework will **not** be accepted after the start of the class on the next day. Labs will be excused if arrangements have been made with me in advance. Exceptions can be made in documented cases of medical or family emergency.

No make-up midterm exams will be given. If one of the three non-mastery midterm exams is missed because of a serious (and documented) illness or emergency, the remaining non-mastery exams will be rescaled. For example, if one non-mastery exam is missed, the remaining two exams will each count 15%. Midterm exams missed for any other reasons will be counted as failures.

Deadlines: The last day to *add* this course is **Wednesday, September 6**. The last day to *drop* this course is **Friday, October 13**.

Student feedback: I am very interested in your opinions about the course. Please feel free to contact me with your suggestions and concerns.