Math 130 (C9 and K1); 140 Henry Bldg.
MWF at 10:00 and M 3:00–5:00
Course Information — Spring 2002

INSTRUCTOR: Ward Henson
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COURSE INFORMATION ON THE WEB: http://www.math.uiuc.edu/~henson

OFFICE HOURS: MWF 11:00 – 11:30, Tu 2:00 – 3:00, Th 1:00 – 2:00, as well as by appointment.

There will be review sessions before exams.

REQUIRED TEXTS: (1) Calculus from Graphical, Numerical, and Symbolic Points of View, Volume 2, Second edition, Ostebee and Zorn, Saunders College Publishing, 1997. We will cover chapters 6, 7, 8, 9, 10, 11, and V.

(2) Conic Section Supplement, Ellis, Gulick, Berkey, and Blanchard, Saunders College Publishing, 1992. This is an extract from a larger text in booklet form. We will cover pages 698–721.

GRAPHING CALCULATOR: It is required that each student have a graphing calculator; the recommended calculator is the TI-82. Any calculator which has the same capabilities will be acceptable. You will use the calculator in class and on exams; nothing more powerful or with more memory than a TI-82 will be allowed during exams.

YOU SHOULD BRING YOUR TEXT AND CALCULATOR TO EVERY CLASS.

COURSE DESCRIPTION: This course will be taught using small group learning methods and graphing calculators.

SMALL GROUP LEARNING METHODS: The goal of this class is to help you learn to think and talk about calculus. Success requires effort. You will spend most of each class working on problems in a group with three or four other students. The instructor will circulate among the working groups to provide some help and advice where necessary. You will be actively doing mathematics during class instead of listening passively to a lecture.

It is expected that you will have read each section of the text before the class in which it is to be discussed. At the end of each class, be sure you know what section is going to be discussed next. Effective participation in class will be impossible if you have not done the reading.

LABS: Each Monday from 3:00 to 5:00 the class will meet in a “laboratory” setting. Usually students will work in small groups on a project or set of problems; these groups will be assigned by the instructor and the assignments will change twice during the semester. At the end of each lab session, each student will hand in a report with solutions to the assigned work. From the reports submitted from a given group, the instructor will randomly choose one report to grade, and all members of the group will receive that grade. The instructor may occasionally give a lower grade to one member of the group if that person’s participation was clearly very poor.

Before exams this period will be used to review material to be covered on the exam and there will be no report to hand in.

Please turn over.
**Homework:** Problems will be assigned in every class with solutions due at the beginning of the next class (except on exam days). From each problem set, one or two problems will be graded (0, 1, or 2 points per assignment); to receive full credit, solutions must not only give the right answer but they must also give a complete justification for that answer.

**Individual Work:** Daily homework is to be written up individually by each student; it is OK to discuss the homework problems with other students, but you are expected to hand in only your own work.

**Late Work:** No late work is accepted, and makeup exams are not possible. Excuses based on documented solid reasons (illness, family difficulties, university athletic trips, job trips, etc) are possible; in such cases grades will be based on the remaining work.

**NO LATE WORK ACCEPTED; NO MAKEUP EXAMS.**

**Exams:** There will be three in-class hour exams during the semester and a three hour final exam:

- **Exam 1:** Friday, February 8.
- **Exam 2:** Wednesday, March 6.
- **Exam 3:** Friday, April 19.
- **Final Exam:** 1:30 – 4:30, Monday, May 6.

**Grading:** The total for the semester is 700 points, broken down as follows: Hour tests = 300 points (100 points each); final exam = 200 points; homework = 100 points; lab writeups = 100 points.

In computing the homework score, the lowest 6 homework scores will not be counted.

You can retrieve your scores during the semester using the campus Gradebook computer system (instructions to be given out later).

**Prerequisites:** First semester calculus – Math 120 or the equivalent.