Calculus II
Math 2423-Honors Section
Fall 2001

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Course Web Page: http://www.math.ou.edu/~amiller/2423
Office Hours: MW 2:30-3:00, Tues 10:00-11:00, Fri 10:30-11:30 or by appointment

Brief Description: This course is the second of a four semester sequence of calculus courses. It provides an introduction to the concept and theory of integration of functions of one real variable. An emphasis will be put on applications of definite integrals in a variety of settings. A significant portion of the course will also be spent developing properties of important transcendental functions—such as logarithms, exponentials and inverse trig functions—which were not introduced in the Calculus I course. The course description which appears in the OU General Catalog gives more details:

2423 Calculus and Analytic Geometry II. Prerequisite: Math 1823 Integration and its applications; the calculus of transcendental functions; techniques of integration; and the introduction to differential equations. A student may not receive credit for this course and Math 2123.

Prerequisites: Students enrolling in this course are required and expected to have taken the course Math 1823, Calculus and Analytic Geometry I, or an equivalent course. This is not a minor matter as students with weak background in the topics of first semester calculus will have a serious disadvantage in this course. Specifically, it is important to be well experienced with: fundamental laws of algebra, graphing functions in the plane, basic concepts and theory of limits and derivatives, rules of differentiation, rational and trigonometric functions, using calculus in curve sketching.

Course Materials: The course textbook will be Calculus (Fourth Edition) by James Stewart (Brooks/Cole, 1999). With minor exceptions, all of Chapters 5 through 9 will be covered during the semester.

Course Web Site: A web site will be used as a central means of disseminating information for this course. The site will be updated incrementally over the semester. All of the homework assignments will be posted there. Review materials and other basic information relevant to the course will be posted there also. The internet address for the main web page is http://www.math.ou.edu/~amiller/2423.htm or you may just follow the link from www.math.ou.edu/~amiller.
Recommendations: The main objective for this course is to acquaint you with fundamental calculus concepts, and to help you to understand these concepts deeply and to see how they may be applied in a variety of settings. Much thought and persistent work on your part will be necessary in order to achieve these goals. Making a regular and concerted effort to read the textbook will be a key to success. To prepare for exams, it is also recommended that you try working as many problems from the book as possible. Condensed answers to the odd numbered problems can be found in the back of the book to assist you in determining whether your approach is correct. Most importantly, if you get confused or stuck on working a problem or understanding a new concept it is important that you try to isolate the problem and ask about it, either during the class lectures or at the office hours. Questions are always welcome during class periods.

Class Schedule: ATTENDANCE AT EACH LECTURE IS REQUIRED AND EXPECTED.

Assignments: Homework assignments will be given, generally weekly, over the semester. The assignments should be written on standard size notebook paper. Quizzes may occasionally be given during the class time.

The assignments are intended to assist students in the important task of keeping up to date with the class over the semester. However, they are not designed to (and will not) comprehensively cover the course topics. For this purpose more inclusive lists of suggested problems will be posted at the web site.

There will also be a number of special assignments given at various times during the semester. Some of these will utilize the computer software MATHEMATICA, some will involve work in teams, and others will involve participating in some of the Math Club events that will be scheduled as the semester progresses.

Exams: There will be three midterm exams, given during regular lecture periods on the following dates:

Exam 1 – Wednesday, September 19
Exam 2 – Friday, October 19
Exam 3 – Monday, November 19

and a Final Exam on Tuesday, December 11 from 8:00 till 10:00 AM

Make-up Policy: Make-up exams will only be possible in very extreme circumstances, and even then an excuse will need to be properly documented and brought to the instructor’s attention in timely fashion prior to the exam. Otherwise, an absence at an exam will lead to a score of zero.
Course Grade: Student course grades will be determined according to the breakdown:

- Assignments 25%
- Three Exams 45%
- Final Exam 30%

In addition to this, there will be a discretionary bonus of up to 5% which may be earned by each student. This discretionary grade will be added to the student’s course total at the end of the semester. Possible ways to earn discretionary points include (but may not be limited to) the following: work on special bonus problem sets which will be announced as the semester progresses, exceptional record on all homework assignments, exceptional grade on one of the midterm exams, regular participation in Office Hours. Please Note: The chances to earn discretionary points will lessen as the semester progresses, so students wanting to take advantage of this need to start early.

Student Disabilities: The instructor for this course is committed to providing an environment in which every student will have an equal opportunity to successfully complete the course. If you have a physical disability that may affect your performance, please contact him so that steps can be taken to ensure full participation and facilitate your educational opportunities.

Academic Misconduct: Students are assumed to be familiar with the OU Academic Misconduct Code, which is available at the OU web site http://www.ou.edu/studentcode/miscode/index.html. Any instances of academic misconduct will be strictly dealt with in accordance with this code.