CALCULUS IV (HONORS) – COURSE INFORMATION
FALL 2011

Instructor: John Albert
Office: PHSC 1004
Phone: 325-3782
Office Hours: M, W, Th 10:30–11:30, or by appointment

Course Content: We will cover Chapters 15, 16, and 17 of the course text, which is "Calculus (6th edition)", by J. Stewart (ISBN 0495011606). In this course we complete the transition, begun in Calculus III, from the calculus of functions of one variable to the calculus of functions of several variables. We study derivatives and integrals of functions of several variables, and how derivatives and integrals with respect to different variables are related to each other. Some basic examples of how to use these derivatives and integrals are studied in detail: how to find maximum and minimum values of functions of several variables, and how to find volumes, surface areas, and other physical quantities of two- and three-dimensional objects which could not be treated by the methods of Calculus I, II, or III. Finally, in Chapter 17 we study a few higher-dimensional generalizations of the Fundamental Theorem of Calculus.

Information about the course, such as homework assignments and test and quiz dates, will be posted on the course page at D2L (**learn.ou.edu**) and on my web page at
math.ou.edu/~jalbert/courses/2443fa11.html .

Grading: The course grade will be made up of the following components:
• Seven 20-minute quizzes, worth 20 points each. Lowest two scores are dropped. (Possible points: 100)
• Three 50-minute exams, worth 100 points each; and a two-hour final, worth 200 points. Lowest exam score is dropped; if the lowest percentage score is on the final, then half of the final exam score is dropped. (Possible points: 400)
• Weekly homework assignments, with roughly ten problems each, and two points possible on each problem. At the end of the semester your final score on the homework is computed by totaling the scores on all the assignments, dropping the lowest score, and converting to a percentage. For example, if there are fourteen assignments, and adding up your thirteen best scores gives you a total 230 out of a possible total of 260, then that is a percentage of 88%, so you will get 88 out of 100 possible homework points. (Possible points: 100)

The total number of possible points on quizzes, exams, and homework is 600. Your final letter grade for the course is determined from your total points as follows. For an A, you need 525 points out of 600; for a B, you need 430; for a C, you need 335; and for a D, you need 240 points. (These numbers are arrived at by using the following scales for letter grades on the homework, quizzes, and exams. On the homework, 80 points is an A, 60 is a B, 40 is a C, and 20 is a D. On the quizzes, 85 points is an A, 70 is a B, 55 is a C, and 40 is a D. On the exams, 90% is an A, 75% is a B, 60% is a C, and 45% is a D.)

Exams: The final exam is scheduled for Monday, December 12 from 1:30 pm to 3:30 pm in the regular classroom, Physical Sciences 809. The other exams will be given during regularly scheduled class periods, on the following dates: Friday, Sept. 23; Friday, Oct. 21; and Friday, Nov. 18.

The use of calculators will not be allowed on exams.

Make-ups: If you are unable to attend a test because of illness, please call me BEFORE the test begins. If I am not in my office, leave a message for me at the Mathematics Department; the number is 325-6711. I will arrange a make-up exam. Other potential reasons for make-up exams include absences related to other university coursework. These should be discussed with me in advance.

In general, make-ups will not be given for quizzes, and late homework will not be accepted.

Religious Observances: It is the policy of the University to excuse absences of students that result from religious observances and to provide without penalty for the rescheduling of examinations and additional required class work that may fall on religious holidays.

Reasonable Accommodation: The University of Oklahoma is committed to providing reasonable accommodation for all students with disabilities. Students with disabilities who require accommodations in this course are requested to speak with the professor as early in the semester as possible. Students with disabilities must be registered with the Office of Disability Services prior to receiving accommodations in this course. The Office of Disability Services is located in Goddard Health Center, Suite 166, phone 405/325–3852 or TDD only 405/325–4173.

Academic Integrity: See the webpage **http://www.ou.edu/integrity/students.html** for explanations of what academic integrity and academic misconduct are, and what are OU's policies concerning them. (Mouse over "Students" at the top of the page and follow the links in the drop-down menu that appears.)