SYLLABUS: Mathematics 247 (Honors Calculus III)
Professor W. R. Wade (Aconda Court 110)

Office Hours
Monday-Wednesday-Friday 8:30-9:00 AM, 11:10-11:30 AM, and 2:30-3:30 PM
Tuesday-Thursday 9:00-9:40, 11:00-11:45 AM
or by appointment.

The Course. This course is a continuation of Math 148. We will study the calculus of functions of several variables aka vector calculus. As usual, we will present both theory and practice with emphasis on applicability. Because this is an honors course, the homework assignments will be short and focused. They are NOT optional. It is extremely important to practice these techniques over a period of time to let them sink deeply into your consciousness. Even very bright students sometimes struggle with some of these concepts. They are subtle, the result of centuries of refinement by scores of very intelligent mathematicians and physicists.

The Class Periods. We shall cover parts of Chapters 1–8 of “Vector Calculus,” 5th edition, by Marsden and Tromba. Since there are many things which come up in class which are not in this text, daily attendance is extremely important.

Unless an exam has been scheduled, each class will begin with a call for questions. Next, a formal lecture will be delivered and a homework assignment made. That assignment is due at the beginning of the next class period. Fold it length-wise like a book and put your name of the front cover.

The Grade. In addition to the homework, there will be three hour exams (announced one week in advance) spread evenly throughout the semester, and a comprehensive final exam, which will be given in our regular room on Thursday, May 6 from 10:15 AM to 12:15 PM.

Each hour exam is worth 100 points, the aggregate score on the homework is worth 100 points, and the final examination is worth 100 points or 200 points (depending on whether you drop an hour examination). At the end of the semester I will average your scores and assign grades according to the following scale:

86-100 A—A-, 71-85 B+—B-, 61-70 C+—C-, 55-60 D+—D-.

The homework will be used to assign “plus” grades for students in borderline situations.

Make-Up Policy. Please note that it is not possible to make up homework because I often give a complete solution the day it’s handed in. If you will be absent, send your homework with a classmate or email it to me by class time at iwade@utk.edu.

I will consider giving a make-up for an hour exam if you have a legitimate excuse. However, be advised that the make-up will be more difficult than the exam given to the rest of the students because I have already used up the simplest questions on the in class exam.