

MA 225 – Multivariate Calculus

Summer I, 2012

Instructor: Anna M. Barry

Course: CAS MA 225 A1, Multivariate Calculus

Dates: MTWTh 3-5 PM, Summer I, May 22-June 28, 2012

Location: MCS B31

Course Text: Calculus: Early Transcendentals by Briggs and Cochran, access code encouraged.

Course Website: <http://math.bu.edu/people/annab/teaching.html>

My Office: MCS 151

My Office Hours: To be determined on the first day of class

My Email: annab@math.bu.edu

Course Description: Parametric equations and polar coordinates. Vectors, lines, planes. Multiple integration, cylindrical and spherical coordinates. Partial derivatives, directional derivatives, scalar and vector fields, the gradient, potentials, approximation, multivariate minimization, Stokes's and related theorems. The course will cover Chapters 10-14 of the text.

The math department has negotiated a reduced price for the text at the BU bookstore where it is sold "bundled" with access to a computer exercise package called "My math lab". While I will encourage you to use the My math lab materials, it will not be a required element of your grade. More information will be given in class.

Homework: The best way to learn mathematics is to DO IT! Homework will be assigned daily and posted to the course website. If you are having difficulty with the homework, it is important to come and see me during my office hours. We have only six short weeks to learn a large amount of material, and falling behind will cause your grades to suffer. **Homework will be due every Monday at the beginning of class. Late homework will not be accepted- come to class on time!**

Exams: There will be two midterm exams and one final exam. Midterm exam dates will be announced one week in advance. Make-up midterm exams will be given only in very exceptional circumstances (note: pre-arranged travel is *not* an exceptional circumstance). In these special cases, the student

must obtain an excused absence from me *prior* to the exam. The final exam will be held on the last day of class- **Thursday, June 28, 3-5 pm**. No early final exams will be given, so make travel plans accordingly.

Participation/Attendance/Quizzes: Your attendance in this course is very important- missing one class during summer semester is the equivalent of missing an entire week during the school year! In addition, you may be called upon to answer questions, present work at the board, or complete “pop” quizzes. If you must miss a class, it is your responsibility to learn the material and get the notes from another student. I will not repeat lectures during my office hours.

Grading Breakdown:

Homework: 10%

Participation/Attendance/Quizzes: 10%

Midterms: 25% each (50% total)

Final: 30%

Academic Conduct: Your work and conduct in this course are governed by the CAS Academic Conduct Code. This code is designed to promote high standards of academic honesty and integrity as well as fairness. A copy of the code is available in CAS Room 105 if you cannot access it on the web, and it is your responsibility to know and follow the provisions of the code. In particular, all work that you submit in this course must be your original work. Any cases of suspected academic misconduct will be referred to the CAS Student Academic Conduct Committee.