

## MAT 203, Multivariable Calculus, SPRING 2007

**Instructor:** Dr. Shaun D. Ramsey

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**Office:** Dunning Decker N102

**Office Hours:** M 1:30-2:30, TTh 11:30-12:20

**Class meetings:** TOLL SG10 MWF 9:30-10:20

**Text:** *Essential Calculus* by James Stewart

**Overview:** The purpose of this course is to dive further into calculus by examining functions of multiple variables. In particular, we will be focusing on functions of higher dimensions. This process starts by understanding something simple like: how to formulate a line in arbitrary dimensions. A function of several variables may represent lines, but it may also represent other complex shapes and surfaces. Using multivariable calculus we can find volumes, curves of steep ascent and descent, and a variety of useful information.

**Topics:** We will cover parametric equations, vectors, and vector operations. We will also cover the calculus of multiple variables occurs in the form of partial derivatives and multiple integrals.

**Advising:** MAT 201 and MAT 202 are prerequisites for MAT 203.

**Grading:** Your grade consists of three exams, one final exam, and assignments. Each is worth 25% of your final grade.

**Assignments:** Assignments will not be collected or graded. However, they are absolutely essential to comprehension of this material.

**Exams:** The exams will be held on February 21, March 30, and April 27. The final exam will be administered during its scheduled slot during final exam week. An absence on the day of an exam will result in a grade of a 0. Except in cases of extreme emergency, exams must be taken on the day the exam is administered. Before a make-up test is scheduled, documentation of the extreme emergency must be given. Make-up exams for tests missed due to an extreme emergency will be arranged for a time that is mutually convenient for the student and Dr. Ramsey.

**Attendance:** Other than missed classwork, lectures and notes, I assign no penalty for absences. It is your responsibility to obtain assigned homework, announcements and class notes from your fellow students. Talk to classmates for class notes. It is important that you attend every class, as there is certainly a correlation between grades and attendance. As a matter of courtesy, students are expected to inform Dr. Ramsey of the reason for any absence.

**Academic Honesty:** You are always subject to the Honor Code of Washington College. If you are unsure if something is considered *cheating*, simply ask, however no collaboration on exams is allowed. As always, if you have questions, feel free to email or stop by my office.

**Accommodations:** If you have a special accommodation/need that has been reported to the college, please let me know discretely during the first week, so that I can work to meet your accommodation.

**Suggestions:** To become a good problem solver, you must work on many problems. If you need help, please see me, peers or the math center for assistance. There are many resources, so there is no excuse for not using them.