

**Math 200 Mathematical Methods for Physical Sciences**  
**Section 11, Autumn Quarter 2006**  
**MWF 8:30 a.m. in E203**

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**Office Hours:** Mondays 12:00 – 13:30, Wednesdays 17:00 – 18:00 and by appointment.

**Reader:** Octavia Biris, more information to follow.

**Textbook:** *Basic Multivariable Calculus* by Marsden, Tromba, Weinstein

**General Policy:** There will be two one hour tests in class during the quarter and a final exam at the end. Homework will be usually assigned on Wednesday in class and due the following Wednesday at the beginning of class. You are encouraged to work together on homework problems, but everyone has to write up the solutions independently. Please order the pages and staple them. Unreadable homework will not be corrected. No late homework.

Hour tests: 15% each, Final Exam: 40%, Homework: 30%

**Important Dates:**

Hour Test 1: Wednesday, October 18 (in class)

Hour Test 2: Wednesday, November 8 (in class)

Final Exam: Friday, December 8, 8:00 – 10:00 a.m. in E203

*It is the policy of the Department of Mathematics that the following rules apply to final exams in all undergraduate mathematics courses:*

1. The final exam must occur at the time and place designated on the College Final Exam Schedule. In particular, no final examinations may be given during the tenth week of the quarter, except in the case of graduating seniors.
2. Any student who wish to depart from the scheduled final exam time for the course must receive permission from Paul Sally (his office is Ry350, his phone is 773-702-7388, his email is [sally@math.uchicago.edu](mailto:sally@math.uchicago.edu)). Instructors are not permitted to excuse students from the scheduled time of the final exam except in cases of an Incomplete.

**Some remarks concerning the Syllabus:** After discussions between the Department of Mathematics and the Department of Chemistry, the Syllabus was changed so that we have to cover the whole book “Basic Multivariable Calculus” by Marsden, Tromba and Weinstein in **one** quarter. (Note that the description in the Course Catalog is not up to date.)

The textbook “Basic Multivariable Calculus” by Marsden, Tromba and Weinstein seems to be out of print. Used copies of the book are available at the University Bookstore.

We will spent approximately the following amount of time on each chapter:

Chapter 1: Algebra and Geometry of Euclidean Space and Chapter 2: Differentiation (5 lectures)

Chapter 3: Higher Derivatives and Extrema (4 lectures)

Chapter 4: Vector-Valued Functions (3 lectures)

Chapter 5: Multiple Integrals (4 lectures)

Chapter 6: Integrals over Curves and Surfaces (4 lectures)

Chapter 7: The Integral Theorems of Vector Analysis (4 lectures)

**Note** that the other section of Math 20000 will follow another textbook. Both section should cover more or less the same material, but it might be more difficult than usual to change from one section to the other.