

**Mathematical Methods for Social Scientists**  
**Math 195 (Sec 45), Autumn 2005**  
Course Document

Lecturer: David Rule  
Office: Eckhart 16  
Phone: (773) 702 6045  
Email: rule@math.uchicago.edu  
Website: [www.math.uchicago.edu/~rule/195/](http://www.math.uchicago.edu/~rule/195/)

Lectures: Monday, Wednesday & Friday, 11:30am-12:20pm, E312  
Tutorial: Thursday, 6-7pm, Eckhart 203  
Reader: Yihan Fang (chrisfyh@uchicago.edu)

Office hours: Wednesdays from 2:30pm to 3:30pm, Thursdays from 4:30pm to 5:30pm, and by appointment.

Text: *Multivariable Calculus*, Stewart, Chapters 11, 13, 14, 15 & 16.

Syllabus: The aim of this course is to understand the methods of multi-variable calculus, with an emphasis on applications. The course covers parametric equations, vectors, the dot and cross product, functions of several variables, partial derivatives, Lagrange multipliers, and double and triple integration.

Assessment: Your grade will be determined by two in-class midterm tests, a final, and homeworks. The final constitutes 50% of your grade, the midterms 20% each, and homeworks total 10%.

The Final Examination: The final examination is on Monday, 5th December from 10:30am to 12:30pm. 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 wishes to depart from the scheduled final exam time for

the course must receive permission from Paul Sally (office is Ry 350, phone is 2-7388, 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 the cases of an Incomplete.

The University examination schedule can be found at <http://registrar.uchicago.edu/students/final-exams.html>.

Homework: Homework should be handed in on or before the given deadline. Late homework will be given zero credit unless an extension is given by me. Extensions and the like will only be given in exceptional circumstances (for example, ill health) and should be requested before the deadline. Please write up your homework neatly and explain yourself clearly. The aim is to understand the material rather than just get the “right answer” in the end.

Miscellaneous items: You are welcome to work on problems together but must write up your solutions independently. Please refer to the University guidelines on plagiarism.

David Rule