## $\begin{array}{c} \mbox{Mathematical Methods for Social Scientists} \\ \mbox{Math 195 (Sec 55), Autumn 2006} \\ \mbox{Course Document}^1 \end{array}$

Lecturer: David Rule Office: Woodlawn Office Phone: (773) 702 4901 Email: rule@math.uchicago.edu Website: www.math.uchicago.edu/~rule/195/

Lectures: Monday, Wednesday & Friday, 12:30pm-1:30pm, SS107 Tutorial: Thursdays, 8pm, E308

Office hours: Wednesdays 3pm-4pm, Thursdays 1:30pm-2:30pm and by appointment.

Course Text: *Multivariable Calculus*, Stewart, Chapters 11, 13, 14, 15 & 16. Another useful book is *Mathematical Methods for Economics* by Klein if you manage to get your hands on it.

Syllabus: The aim of this course is to understand the methods of multivariable 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 examinations, homework and a final examination. The in-class examinations each constitute 20% of your grade, the final examination 50%, and homeworks total 10%. Any student wishing to take the course for a P/F grade must request this in writing before the start of the final examination.

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.

<sup>&</sup>lt;sup>1</sup>Version 2