

## MA 633

MA 633 is a continuation of MA 533 and will also be out of Evan's book entitled *Partial Differential Equations*. The course will consist of all or parts of

Chapter 5	Sobolev Spaces
Chapter 6	Second Order Elliptic Equations
Chapter 8	The Calculus of Variations

and as much of chapter 7 (Linear Evolution Equations) as we have time for.

We will also cover section E in the Appendix of our textbook - dealing with functional analysis. A basic knowledge of real variables: measure theory,  $L^p$  spaces, absolute continuity, and differentiation theory will be assumed. I plan to run the course the same way as in the first semester. That is, problems will be assigned and collected at regular intervals. Also a midterm and final will be given. Your grade will be based on

Midterm = 100 points
Final = 100 points
Homework = 200 points

My office hours, officially are

MWF 11 - 1 pm

but you all are welcome to drop by anytime. If I am real busy I might ask you to come back, but otherwise will be glad to help you. The first reading assignment is to review section E in the appendix. The first homework assignment is problems 5 - 10, 12, 13 on pages 290 - 291. I plan to collect these problems in about three weeks (the exact date will be announced in class).