

MATH 533 – PARTIAL DIFFERENTIAL EQUATIONS
FALL 2015

Syllabus

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Textbook: *Partial Differential Equations: an introduction*, 2nd edition, L.C. Evans. Another good reference text is *Introduction to Partial Differential Equations* by G.B. Folland. Previous editions of this course have also recommended *Partial Differential Equations* by Fritz John and also the books of the same name by Michael Taylor.

Material: This course is an introduction to the study of partial differential equations. The idea is to cover most of Chapter 1-2 of Evans's book, combined with selected topics from Chapters 3-4. In particular, we will discuss some basic methods for studying transport equations, Laplace and Poisson equations, heat equations, wave equations, and first order nonlinear equations.

Grades:	Problem Sets	40 %
	Midterm	30 %
	Exam	30 %

Problem sets will be assigned roughly once per week, to be turned in at the beginning of class on the due date. Late problem sets will not be accepted. You are allowed and encouraged to discuss problems with others, but your solutions must be written up independently. Solutions should be written clearly, in complete sentences. References to the text should include section or page numbers.

Each problem set will include assigned reading from the textbook. You will be responsible for understanding the material covered in the readings as well as that covered explicitly in class.

A midterm exam will be scheduled during the week of October 23, with the precise date to be announced.

The final exam is scheduled by the university to occur on December 16, 2015, at 10:30.

Updates to this document, along with announcements and problem sets, will be posted on my website, under teaching.