Partial Differential Equations I  
Math 6540(8540) Syllabus Fall 2008

Space-Time: Gillham Hall 4400 MWF 11-11:50am
Instructor: Mao-Pei Tsui
Office Hours: UH2080B M 1:30-3:00pm, W 1:30-3:00pm, F 1:00-2:00pm
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Class Web Site: http://www.math.utoledo.edu/~mtsui/6540f08/6540.html


Homework: I will assign problem sets every two weeks, to be handed in. These assignments and their due
dates will be posted on the course website.

Exams: We will have one in-class one hour midterm exams, and a take home final exam.
   • Midterm I Oct. 20 (Monday) 11-11:50 am

Grading: The following percentages are assigned to the components of the student’s grade.
   Hand in homework 40%
   Midterm 20%
   Final Exam 40%

Course outline: This is a course in partial differential equations. The focus of the course is to introduce
important techniques in the study of partial differential equations.
Possible topics:
   • Chapter 1 (Evans’s book) Introduction
   • Chapter 2, (Evans’s book) Four important Linear PDE Transport equation, Laplace’s equation, Heat
equation, Wave equation
   • Chapter 2 (Renardy and Rogers) Characteristics methods;
   • Chapter 3 (Renardy and Rogers) Conservation Laws and Shocks
   • Chapter 4 (Renardy and Rogers) Maximum Principles