Fall 2008 - Math 462 Section 0101
Partial Differential Equations for Scientists and Engineers

Lectures: TuTh 9:30am-10:45am in MATH B0421

Instructor: Prof. Antoine Mellet
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Course web page: www.math.umd.edu/∼mellet/math462

Text and Course Materials: *Partial Differential Equations: An introduction*, (Second Edition) by Walter Strauss. Published by Wiley. ISBN: 978-0-4-7005456-7

Course description: This course is an introduction to partial differential equations. We will discuss first order equations, the heat equation, the wave equation and the Poisson equation, the last three being the prototype of second order equations. We will also discuss nonlinear equations of each type. We will develop the method of separation of variables and eigenfunction expansions, which lead to Fourier analysis. Qualitative properties and numerical methods will also be studied. This corresponds to Chapters 1 to 8 of the textbook (except 7).

Grading Scheme: Your final grade will be computed as follows (assuming that there will be a grader assigned to this course):

Homework	20%
Midterms	40% (20% each)
Final	40%

Exams: There will be two midterm exams and one final exam The midterm exams will be held during the class sessions on the following dates:

Midterm 1: Tuesday October 7th
Midterm 2: Thursday November 13th

The final exam will take place on Tuesday, December 16 from 8:00am to 10:00am

Permission to write a makeup midterm may be granted (or other arrangements made) in the following two circumstances: (a) prior notice of a valid, documented absence (e.g. out-of-town varsity athletic commitment) on the scheduled date; or (b) notification to the instructor within 48 hours of absence due to medical condition. Original written documentation, for example a doctors note or letter from a coach, is required.

Homework will be assigned once a week and due the following week. Late homework will never be accepted. However, the lowest two homework grades will be dropped.

Students with disabilities: The University of Maryland provides upon request appropriate academic accommodations for qualified students with disabilities. Students who seek special accommodations due to disabilities must first set up an appointment with Dr. Jo Ann Hutchinson or her staff at the Disability Support Services (DSS) in the Counseling Center, 314-7682. Students should download the DSS registration forms and bring appropriate documentation to the DSS office (Shoemaker 0126) prior to the meeting.

Policy on Scholastic Dishonesty: You are expected to abide by the University's policy on academic integrity. All cases of academic dishonesty will be referred to the Dean of Students Office.