

# Math 106B : Syllabus and general information

January 14, 2008

**Instructor:** Maria Schonbek

Office: Baskin Engineering 353A phone: 459-4657

**Office Hours :** T 12:45-1:45 pm, Th 4-5pm,F:12:30-1:30.

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**Lectures : 2:00-3:45 T,Th, Social Science 2: 159**

**Textbook Partial Differential Equations, by Walter Strauss: .**

**Grading:** Homework: 20%, Midterm: 35 %, Final: 45 % .

This Syllabus gives a general idea of the progress of the class. There will be variations depending on how fast certain topics are understood .

**Midterm date: Week 6: February 13**

**Final date: March 20: 8:00-11:00am**

Enrollment: For problems with and questions about enrollment please contact Naomi Brokaw ([nabrokaw@ucsc.edu](mailto:nabrokaw@ucsc.edu)) at the Math office (195 Baskin Engineering Bld).

This course is an introduction to Partial differential equations. We will cover the following topics:

1. Introduction to Partial Differential Equations; First examples.
2. How to solve first order linear equations.
3. Well posedness.
4. Classification of second order equations.

5. Wave equation and Diffusion equation.
6. Separation of variables method; applications.
7. Fourier Series.
8. Laplace's equation.
9. Fourier Transform \*.

The starred section will only be covered if time permits.