

<b>MAP 4341</b>	<b>Instructor: Nick Cogan</b>
<b>Elementary PDE I</b>	<b>Office: LOV 002-E</b>
<b>Office hours: TR 12:15-2:00</b>	<b>Phone: 644-7196</b>
<b>TR:11:00 - 12:15</b>	<b>E-mail: cogan@math.fsu.edu</b>
<b>LOV 201</b>	<b>Website: <a href="http://www.math.fsu.edu/~cogan/">www.math.fsu.edu/~cogan/</a></b>

**Text :** Applied Partial Differential Equations with Fourier Series and Boundary Value Problems, 4th edition,  
by Richard Haberman

**Prerequisites:** Multi-variable Calculus, Ordinary Differential Equations

**Course Objective:** This course is designed as an introduction to partial differential equations. The focus of the course is the derivation and analysis of a variety of PDE's. We will restrict our attention to PDE's with finite spatial domains. Topics will include parabolic, elliptic, hyperbolic equations and Sturm-Liouville equations. Solution techniques include separation of variables, Fourier series and a handful of other techniques.

**Expectations:** You are expected to attend class and participate in discussions. A student absent from class bears the full responsibility for all subject matter and procedural information discussed in class.

- It is expected that students will work together on the homework assignments although the write-up should be done independent of the other students.

**Assignments:** Homework problems will be assigned approximately every 2–3 weeks. The due date will be given with the assignment (typically 7-10 days after assignment). A subset of the assigned homework will be collected and graded. These count a large fraction of the final grade, so you should work the problems carefully and turn in the best work possible. I reserve the right to return unacceptable homework ungraded. Late assignments will be accepted within 2 days from the due date, but with a 25% grade reduction.

**Quizzes:** There will be quizzes throughout the course and will be announced. The quizzes will be short (e.g. 15 minutes) and will focus on examples given in class and in the book.

**Exams:** There will be two midterm examinations and a final exam. Make-up exams will only be given with a written doctors note or with approval from the dean and myself. Roughly the midterms will cover chapters 1-3, 4-5 and 7

- The final exam is scheduled for Friday December 12 from 3:00 to 5:00. You must contact me immediately if you have a conflict. The room will be announced. **Completion of the final is required in order to pass the class.**

**Grading:** The average of the midterm exams counts 25% of the grade, and the final exam counts 25%. The average of the quizzes will count 20%. Homework assignments will count 30%.

Letter grades will be determined from numerical grades as follows: A: 90-100; B: 80-89; C: 70-79; D: 60-69; F: 0-59. Plus or minus grades may be assigned in a manner consistent with standard University practice. A grade of I will not be given to avoid a grade of F or to give additional study time. Failure to process a course drop will result in a course grade of F.

- Please feel free to contact me by e-mail, phone, after class, before class or during office hours.

- **HONOR CODE.** The Academic Honor System of The Florida State University is based on the premise that each student has the responsibility 1) to uphold the highest standards of academic integrity in the student’s own work, 2) to refuse to tolerate violations of academic integrity in the University community, and 3) to foster a high sense of integrity and social responsibility on the part of the University community. Please note that violations of this Academic Honor System will not be tolerated in this class. Specifically, incidents of plagiarism of any type or referring to any unauthorized material during examinations will be rigorously pursued by this instructor. Before submitting any work for this class, please read the “Academic Honor System” in its entirety (as found in the FSU General Bulletin and in the FSU Student Handbook and ask the instructor to clarify any of its expectations that you do not understand.

- **AMERICAN DISABILITIES ACT.** Students with disabilities needing academic accommodations should: 1) register with and provide documentation to the Student Disability Resource Center (SDRC); 2) bring a letter to the instructor from SDRC indicating you need academic accommodations. This should be done within the first week of class. This and other class materials are available in alternative format upon request.

#### Important Dates

August 27	Classes begin
August 30	Add/drop ends
September 3	Labor Day. No Classes
October 12	Last day to drop without grade
November 12	Veteran’s Day. No Classes
November 22-23	Thanksgiving Break
November 30	Last day of classes
December 3-14	Final exams
December 12	Course final exam