Class Policy

Course: Math 4/896, Mathematics Seminar

 Topic: Inverse Theory

Place/Time: 12 AvH, 3:30-4:45 TR, Spring 2006

Preq: Math 314 (Linear Algebra) and 221 (Differential Equations), or permission.

Objectives: To help students achieve competence in the following areas:

- Understanding of mathematical formulations of inverse problems and parameter identification.

- Understanding of inverse theory philosophy and methodology.

- Implementation of algorithms for illustration of inverse problems and their solutions (mainly via Matlab platform).

- Interpretation of results obtained by theoretical analysis and computation (consistent with Hamming's dictum: *The purpose of computing is insight, not numbers.*)

Instructor: Dr. Thomas Shores

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Office Hours: Monday 3:30-5:00, Tuesday 11:00-1:00, Thursday 12:00-1:30, Friday 8:00-9:30, and by appointment. Office: 229 AvH

Class Attendance: Is required. If absent, it is incumbent upon the student to determine what has been missed as soon as possible. It is advisable to consult with the instructor.

Homework/Projects: Homework will be assigned in class and collected in accordance with the syllabus, and will be usually returned within one week. Although collaboration in solving problems is encouraged, it is strictly forbidden to copy someone else's homework. In some cases I will allow teams of two to turn in a single solution for certain problems. The official programming language for this course is Matlab. Prior experience in Matlab is not required. Current information about the course will be available through this lab account and the web (via the 384H homepage or my home page). Using the web is strongly recommended for keeping track of current activities in the course.

Reading Assignment: Read the sections of the texts as, or before, they are covered in class lectures. This is a standing assignment throughout the semester.

Grade: One midterm will be given and will account for 130 points. The final exam will count 130 points. Each exam may have a take home component. In-class exams are closed book with calculators. Homework will count 240 points. The final grade will be based on these 500 points.

Final Exam: Will be comprehensive. To be given on Monday, May 1, 8:30-10:30 am in 12 AvH.

Grades of "I", "W" or "P": These grades will be given in strict accordance with University policy. (See any Schedule of Classes for the relevant information and dates.)

Keep This Information!!!