14.30
Introduction to Statistical Methods in Economics
Spring 2007

Class meets in E51-057
MW 10:30-12:00n
Recitation meets in E51-085
F 11:00-12:00n

Inst.:  Sara Fisher Ellison    T.A.:  Peter Hinrichs
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meetings by appointment
Assistent: Linda Woodbury

1. Course Description and Prerequisites: This course will provide a solid foundation
   in probability and statistics for economists and other social scientists. We will
   emphasize topics needed in the further study of econometrics and provide basic
   preparation for 14.32. No prior preparation in probability and statistics is required,
   but familiarity with basic algebra and calculus is assumed.

2. Texts: The required text is Introduction to Mathematical Statistics and its
   Applications by Larsen and Marx. It’s easier than the level of the course, but I think it
   provides pretty good discussions. Also, some may want Probability and Statistics by
   DeGroot or Statistical Theory by Lindgren. DeGroot is a good but somewhat more
difficult book. Lindgren doesn’t offer much intuition, but it’s a nice reference.

3. Requirements: The course grade will be based on three non-cumulative exams (25% each)
   and approximately eight graded problem sets (a total of 25%). The first two
   exams will be in class, and the third will be during exam week. The exams will be
   closed book unless otherwise indicated. The problem sets will typically be handed
   out on Wednesday and due the following Wednesday (with a couple of exceptions to
   that schedule). You are expected to complete the problem sets on your own and
   without consulting old problem set solutions---it will clearly be in your interest to
   understand all of the material on them. Regular attendance at the recitation is strongly
   recommended, as the T.A. will discuss problem sets, clarify lecture material, and
   provide other useful guidance.
4. **Schedule:** The exam schedule is as follows:

Monday, Mar 12  first exam
Monday, April 23 second exam
Exam week third exam

notes:
Friday, Feb 9  no recitation
Monday, Feb 19 no class---Presidents’ Day
Tuesday, Feb 20  still no class
Monday, Mar 26 no class---Spring Break
Wednesday, Mar 28  no class---Spring Break
Friday, Mar 30 no recitation---Spring Break
Friday, Mar 23 or
Friday, April 6  no recitation---class’ choice which day
Monday, Apr 16 no class---Patriots’ Day

5. **Course Outline:** Readings are from Larsen and Marx (L&M), DeGroot (D), and Lindgren (L).

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Advanced topics, time permitting
Bayesian Analysis
Nonparametric Methods
14.30 Policies

1. Problem sets are designed to help you learn how to apply the material presented in lectures and recitations. You are permitted to discuss course material, including homework, with other students in the class. However, you must turn in your own individual solutions to each homework set. Discussion with others is intended to clarify ideas, concepts, and technical questions, not to derive group homework set solutions. Identical homework set answers (especially when the steps used to derive answers are not shown or when questions of interpretation are involved) violate this policy and may receive no credit. Also, you are expected to complete the problem sets without consulting old problem set solutions.

2. Handwritten solutions are fine, as long as they are legible and neat. Please remember: if we can’t read it, we can’t grade it.

3. In fairness to students who complete assignments on time, late homework sets will not be accepted. You may turn in assignments during the lecture on the day they are due. After the lecture, assignments may be placed in a designated box that will be set out outside E52-274b until 4:30 pm. Do not leave assignments in the professor or T.A.’s office or mailbox.

4. Taking all three exams is a requirement of the course. Missing an exam without a valid excuse will result in a failing grade for the entire course.

5. To be considered valid, an excuse must be proffered prior to the exam that is to be missed, if at all possible, the excuse must be in writing, and it must be verifiable. These criteria are necessary, not sufficient, however. We reserve the right to deem an excuse meeting the above criteria invalid.

6. An oral make-up exam will be given in the event of a valid excuse.

7. All requests for regrades must be submitted in writing within one week of the exam being handed back.

8. Cheating or academic dishonesty in any form will not be tolerated and will result in swift punitive action. This includes but is not restricted to copying information from other students’ exams, communicating with other students during exams, failing to follow the rules of the exams regarding notes, calculators, etc., altering an exam for the purpose of a regrade, and producing fraudulent written excuses. Any student found to have cheated or behaved unethically or dishonestly will be given a grade of F on the exam involved and referred to the appropriate disciplinary committees within MIT for further action.