ECON 211f (1)
Introduction to Econometrics
Spring 2004

SYLLABUS AND COURSE OUTLINE
(Subject to change)

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Office Hours: MW 1 – 3pm

Teaching Assistant: TBA

Classes: TF 1:40pm – 3:00pm, Sachar 116

Course Objectives   The term econometrics is hard to define but vaguely it means economic measurement. It is a body of statistical methods developed for the analysis of numerical data. Economists use econometrics to measure economic phenomena, estimate economic relationships, test the validity of competing economic theories, forecast economic variables, and evaluate government and business policies.

The course is the first of the two consecutive modules on econometrics. We will start with the basics of statistics including some probability theory and random variables and then move on to sampling, estimation, hypothesis testing. We will cover the simple regression method as well as inference. Along the way, besides the basic concepts you will gain experience in applying them to actual data, and interpreting the results.

This class is for graduate students with no econometrics and regression analysis background. If you have taken any econometrics course, should not take this course since most of the material will be repetitive. Also, you cannot take both this module and IBS210F, because of the significant overlaps in subject material.

Since it will be just about impossible to understand the motivation for such analysis, or the logical interpretation of the results, without a foundation in economic theory, only people who have had some economics beyond an introductory course should take this class. Furthermore, people who are not comfortable with the basic statistical concepts will likely have some difficulty with this class.

Disability Clause   If you are a student with a documented disability on record at Brandeis University and wish to have a reasonable accommodation made for you in this class, please see me immediately.

Honesty Clause   You are expected to be honest in all of your academic work. The University policy on academic honesty is distributed annually at section 5 of the Rights and Responsibilities handbook. Instances of the alleged dishonesty will be forwarded to the Office of Campus Life for possible referral to the Student Judicial System. Potential sanctions include failure in the course and suspension from the University. If you have any questions about my expectations, please ask.

Textbooks

Required *Statistics and Econometrics,* by O. Ashenfelter, P. B. Levine, D. J. Zimmerman, John Wiley, 2003.

Recommended *Basic Econometrics with Software Disk Package*, Fourth Edition, by D. Gujarati, McGraw Hill, 2002.

Recommended *A Guide to Econometrics,* Fourth Edition, by Peter Kennedy, MIT Press, 1998.

Grading Information Your grade for the course will be determined on the basis of the homework assignments (10%), class attendance, unannounced quizzes and participation (10%), midterm exam (25%), term paper (20%) and a final exam (35%). The importance of keeping up with the homework assignments cannot be over-emphasized, and late solutions will not be accepted. The questions on the assignments are meant not only to serve as a review but also to explore issues introduced in the lectures. Class participation is also expected, and performance may be taken into account in assigning final grades. The term paper is an empirical project, in which you will be responsible for analyzing a data set using the techniques developed in class. The results must be presented in a coherent essay, which will be graded on the basis of its internal logic, completeness, grammar and style, in addition to its statistical methodology. If you have any conflicts with the exams let me know in advance. If you miss an exam without an acceptable legal document/reason (for example, illness supported by a medical report), no make-up exam will be given. There will be absolutely no make-up quizzes (since they are unannounced).

I will also assign weekly readings. All reading assignments come from the textbook and will be posted in the webct. Please keep up with your reading assignments. It is essential for you to understand the concepts presented in the class. Feel free to ask questions during the lecture. Studies (using econometric techniques) show that attending class regularly leads to higher grades. If you miss classes, you will miss out on material and ideas that are not included in the text, but are included on exams.

Course Outline (preliminary)
1. Introduction
2. Basics of Probability Theory (Ashenfelter et al, Chapters 2 – 5; Gujarati, Appendix A)
3. Sampling (Ashenfelter et al, Chapter 6)
4. Estimation and Testing (Ashenfelter et al, Chapters 7 and 8; Gujarati, Chapter 3)
5. Simple Regression (Ashenfelter et al, Chapter 9; Gujarati, Chapter 4)
6. Inference (Ashenfelter et al, Chapter 10; Gujarati, Chapters 4 – 6)
7. Multiple Regression – time permitting (Ashenfelter et al, Chapter 11; Gujarati, Chapters 7 and 8)