BOSTON COLLEGE
Department of Economics

EC 228: Econometrics
Prof. Christopher Baum
Spring 2003
http://fmwww.bc.edu/EC-C/S2003/228/
Admin Bldg 486, 552-3673, baum@bc.edu
Hours: Thu 1:00-3:00 pm; by appt.; email anytime

This course is designed to introduce students to econometrics: the field of economics which develops the methods by which statistical tools are employed in empirical research. We will focus on estimation and inference in the context of the most widely used methodology, linear regression analysis of a single equation. Students completing the course will gain an understanding of the analytical foundations of econometric analysis as well as acquiring significant hands-on experience with data analysis and the economic interpretation of empirical findings.

Required text:

J.M. Wooldridge (W), Introductory Econometrics: A Modern Approach, South-Western College Publishing, 2d ed. 2003.

Access to the Stata statistical package, version 7.0, through the SLSC or a personal copy.

Expected background:

Completion of EC 151, Economic Statistics, or equivalent; familiarity with the materials in W Appendices A, B. Appendix C will be briefly reviewed in class.

Calculus will be employed, if sparingly; an understanding of partial derivatives is valuable.

Course requirements:

35% final examination; 30% midterm examination; 35% graded homework assignments. No makeup examinations will be given. Homework assignments, which will involve both analytical exercises and computer work, are to be your own work and will not be accepted after their due dates. You are responsible for familiarity with the College of Arts & Sciences' policy on academic integrity. You are expected to attend each lecture, having adequately prepared the material to be discussed. Please help us keep to the schedule by arriving and getting settled before the lecture is scheduled to commence.

Software:

The homework assignments will require you to become familiar with Stata, a general-purpose statistical package in wide use across social science disciplines. A short tutorial on the use of Stata will be provided in class. Stata has the same "look and feel" on all platforms on which it runs: Macintosh, Windows, Linux, and Unix. There are also extensive web-based tutorials on the use of Stata for regression analysis, accessible via the course home page. There is also extensive on-line help within the program, and links from Stata's "findit" command to Internet-accessible resources as well. You may submit any questions on Stata use to me via email, which I read and answer seven days a week.

An adequate number of copies of Stata for both Windows and Macintosh machines have been installed in the SLSC in O'Neill. If you would like to acquire a copy of Small Stata (the student version) or Intercooled Stata for Windows or Macintosh for your own use, you may order it through the Stata GradPlan (http://www.stata.com/info/order/new/edu/price-gradplan.html). The student version, Small Stata, is limited in the number of observations and variables which may be analyzed, but otherwise is a full version of Stata. If you are going to be doing senior thesis work with large datasets, you will need Intercooled Stata, but Small Stata will suffice for all class homework assignments. Materials ordered by phone or fax through the GradPlan are ready for pickup in 1-2 business days from Mrs. Tubman in the Economics office, Admin Bldg 412B. You will need access to the Internet to work with the datasets that will be analyzed in homework assignments.

Meetings	Dates	**Tentative Schedule (no class 28 Feb, 17 Mar)** Material
1, 2, 3, 4	J 13, 15, 17, 22	Ch.1: Nature of Econometrics; App. C, Math. stat.
5, 6, 7, 8, 9	J 24, 27, 29, 31, F 3	Ch. 2: Simple regression model, Stata tutorial
10, 11, 12, 13	F 5, 7, 10, 12	Ch. 3: Multiple regression analysis: Estimation
14, 15, 16	F 14, 17, 19	Ch. 4: Multiple regression analysis: Inference
17, 18	F 21, 24	Ch. 6: Multiple regression analysis: Further issues
19, 20, 21	F 26, M 12, 14	Ch. 7.1-7.4: Dummy variables (NO CLASS 28 FEB)
	March 10	Midterm exam, Chapters 1-6
22, 23, 24	M 19, 21, 24	Ch. 8.1-8.4: Heteroskedasticity (NO CLASS 17 MAR)
25, 26	M 26, 28	Ch. 9.1-9.3: Specification and data problems
27, 28, 29	M 31, A 2, 4	Ch. 10: Regression with time series data
30, 31, 32	A 7, 9, 11	Ch. 12.1-12.5: Serial correlation in time series data
33, 34, 35	A 14, 16, 23	Ch. 15.1-15.7: Instrumental variables, 2SLS
36, 37	A 25, 28	Ch. 16.1-16.5: Simultaneous equations models
	Thu May 8, 9 AM	Final exam