Professor Thomas MaCurdy Winter 2001-02

Economics 172/272
ECONOMETRICS III
Course Outline, Requirements and Reading List

Course Description: This is a basic course in econometrics designed to provide students with the tools required to evaluate and to carry out empirical research. Students will acquire: (1) the ability to analyze applied and theoretical econometric problems; and (2) experience in analyzing economic data. Attention will focus on the use of nonlinear estimation methods, multivariate and simultaneous equation systems, and qualitative and limited dependent variable models.

Prerequisite: Economics 171/271 or its equivalent.

Texts: Recommended texts for this course are:

F. Hayashi, Econometrics (abbr. H below).

R. Davidson and J. MacKinnon, Estimation and Inference in Econometrics, (abbr. DM below).

Reading from this textbook, listed in the outline below, provides alternative presentations of the material covered in class.

Course Web Site: http://www.stanford.edu/class/econ272/

Course Requirements: The course grade will be based on 2 empirical exercises and 3-4 problem sets. There will be a final for anyone wanting a final grade not based on taking the econometrics comp. The empirical exercises involve analyses of the longitudinal data set used in *The Bell Curve*, a book published by Herrnstein and Murray on the role of youths' IQ in their socioeconomic status. In calculating final grades for the course, the empirical exercises count 33% in the calculation for those students taking the final. For those taking the econometrics comp, exercises and problem sets count as 100% of the grade for the course, and the assigned grade consists of a weighted average of the comp grade and the grades received in this and the other econometrics courses.

TOPICS AND READINGS

I. Asymptotic Distribution Theory

Readings: H: 2.1
DM: 4

II. A General Theory of Estimation and Testing

Readings: H: 1.5, 2.2 - 2.8, 3.3 - 3.7, 4.1- 4.3, 7
DM: 5.1-5.5, 5.7, 6.1-6.2, 6.8, 7, 8, 17

III. Systems of Equations

Readings: H: 4.4- 4.6,
DM: 9.2, 9.4-9.9, 17

IV. Simultaneous Equation Models

Readings: H: 3.8, 4.4-4.6,
DM: 7, 18

V. Qualitative and Limited Dependent Variable Models.

Readings: H: 8.1-8.3
DM: 15

Schedule: Projected due dates for empirical exercises (EE) and problem sets (PS):

EE1 - Feb 22	PS3 - March 12
PS1 - Feb 26	PS4 - March 15
PS2 - March 4	End of course - March 15
EE2 - March 8	Econometrics Comp - April 1
	Final Exam - Week of March 18-22 or April 1