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).

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
PS1 - Feb 26
PS2 - March 4
EE2 - March 8

PS3 - March 12
PS4 - March 15
End of course - March 15
Econometrics Comp - April 1
Final Exam - Week of March 18-22
or April 1