

DEPARTMENT OF ECONOMICS  
UNIVERSITY OF CALIFORNIA, BERKELEY

ECONOMICS 240B  
**Econometrics**  
SPRING 2006

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cemmap  
U.C.L. and I.F.S.  
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The second half of this course will cover maximum likelihood estimation and inference for nonlinear statistical models used in the analysis of cross-sectional data with applications in microeconometrics. Generalized method of moments estimation and inference will also be addressed towards the end of the course.

The grade for the second half of the course will be based on approximately biweekly problem sets (20%) and an exam (80%). This second midterm exam will be given in class on May 8; there is no final exam. (Any time conflicts should be discussed with the instructors well in advance of the exam date.)

The required text for this part of the course is *An Introduction to Classical Econometric Theory* by Paul Ruud. Useful supplementary texts are *A Course in Econometrics* by Arthur Goldberger and *Econometric Analysis* (5th edition) by William Greene. Some of the problem sets will require the use of statistical packages in the Econometric Microcomputer Laboratory.

OUTLINE OF COURSE

- I. ML Estimation:** Ruud, Chap. 14.
- II. ML Asymptotic Distribution Theory:** Ruud, Chap. 15.
- III. ML Inference:** Ruud, Chap. 17.
- IV. GMM Estimation:** Ruud, Chap. 21.
- V. GMM Inference:** Ruud, Chap. 22.

Examples based on **Discrete Dependent Variables** (Ruud, Chap. 27), **Censored and Truncated Dependent Variables** (Ruud, Chap. 28) and **Simultaneous Equations** (Ruud, Chap. 26) will be used to illustrate the above methods.