ECON 8838  
Professor Byung-Joo Lee  
Office: Econ 102  
Phone: 492-2108  
Office Hours: TR 10-10:30, 2-3

Seminar-Math Econ & Econometrics  
Spring 1992  

DESCRIPTION:  
This is the second half of the year-long sequence in econometric methodology. The objective of this course is to introduce the conventional and frontier topics of econometric methodology, after which students do not experience difficulties in reading professional journal articles.

PREREQUISITE:  
Satisfactory completion of Econ 8828.

TEXTBOOKS:

3. Further readings will be assigned later.

ORGANIZATION:  
Two lectures per week. One midterm and one final will be given. A term paper is required and will be presented in a class during the last week of class. This paper will be developed for the bigger project such as research paper or dissertation. The proposal for this paper will be due after the Spring break (3/31/92) and the complete paper will be due on May 31, 1992.

GRADING:  
30% for each exam and 40% for the research paper.
TENTATIVE COURSE SCHEDULE

1. Asymptotic Theory (Amemiya, Chapter 3)
   - Different Mode of Convergence
   - Law of Large Numbers
   - Central Limit Theorem

2. Maximum Likelihood Estimation (Amemiya, Chapter 4)
   - Cramer-Rao Lower Bound
   - Consistency
   - Asymptotic Normality
   - Non-linear Least Squares
   - Iterative Procedure
   - Hypothesis Testing

3. Limited Dependent Variable Analysis (Maddala, Chapters 1, 2, 6)
   - Probit
   - Logit
   - Tobit Analysis
     - Censored Regression Model
     - Truncated Regression Model

4. Frontiers of Econometrics (Further reading list will be provided later)
   1. Semiparametric Analysis
      - Method of Moment Analysis
      - Least Absolute Deviation
      - Maximum Score Analysis
      - Single Index Model
   2. Nonparametric Analysis

5. Presentation (final week)