ECO 6352
Applied Econometrics
Spring 2007

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Time & Location: T, 5:00-7:50, 303 Lee
Office Hours: T, 2:00-5:00, and by appointment

Description: This course is a follow-up to the introductory econometrics course ECO 5350. The major purpose is to extend the student's econometric knowledge base by covering limited dependent variable methods, common data issues, instrumental variables, and panel data methods. In addition, students will learn to read and evaluate applied econometric papers, as well as perform statistical analyses using STATA.

Prerequisite: ECO 5350 or instructor permission is required.


Evaluation: Students will be evaluated through homework assignments (20%), three exams (20% each), and an in-class presentation/write-up (20%). The first exam will be a mid-term. The second exam will be a non-comprehensive exam during the scheduled final exam time. The third "exami" will be a take-home computer assignment (due at the time of the second exam). Homework assignments may be completed jointly, although each student must turn in a homework to receive credit. The computer exam is to be completed individually. No late homeworks are accepted, and make-up exams are only possible if approved by myself prior to the exam.

In addition, during the final week of classes each student will present one applied paper from the list of possible papers. Presentations should be roughly 20 minutes. Some potential questions to address:
- What question is the author(s) seeking to answer?
- What econometric method is being used in the paper?
- What data are used?
- What conclusions does the author(s) draw? Are they sensical?

A 5-8 page write-up of the article addressing the same questions as above is also due at the time of the second exam. The write-up should focus particularly on the choice of the econometric method given the problem being addressed, assumptions required for consistent estimates, the interpretation of the results, and any shortcomings of the econometric method. An “excellent” write-up will do more than merely summarize the paper, but rather will offer some independent assessment of the paper’s merits, as well as some suggestions for alternative ways in which the author(s) could have proceeded.

Schedule: First class, January 16; spring Break, March 12 - 17; last day to drop course, April 4; last class, April 24; final exam, May 9 (3:00 – 6:00).

Disability Accommodations: Disability Accommodations: Students needing academic accommodations for a disability must first contact Ms. Rebecca Marin, Coordinator, Services for Students with Disabilities (214-768-4557) to verify the disability and establish eligibility for accommodations. They should then schedule an appointment with the professor to make appropriate arrangements. (See University Policy No. 2.4.)

Religious Observance: Religiously observant students wishing to be absent on holidays that require missing class should notify their professors in writing at the beginning of the semester, and should discuss with them, in advance, acceptable ways of making up any work missed because of the absence. (See University Policy No. 1.9.)

Excused Absences for University Extracurricular Activities: Students participating in an officially sanctioned, scheduled University extracurricular activity should be given the opportunity to make up class assignments or other graded assignments missed as a result of their participation. It is the responsibility of the student to make arrangements with the instructor prior to any missed scheduled examination or other missed assignment for making up the work. (University Undergraduate Catalogue).
COURSE OUTLINE

1. Limited Dependent Variable Models (Chapter 17.1-17.4)
   a. Introduction to Maximum Likelihood Estimation
   b. Binary Models (Linear Probability, Logit/Probit)
   c. Censored Regression Models (Tobit)
   d. Count Models (Poisson, Zero-Inflated Poisson)
   e. Qualitative Response Models (Multinomial Logit, Conditional Logit, Nested Logit)
   f. Ordered Response Models (Ordered Logit/Probit)

READINGS:

**EXAM I**

2. Data Issues (Chapters 17.4-17.5, 9.3, 15.1-15.5)
   a. Truncated Regression Model
   b. Selection Bias
   c. Measurement Error
   d. Instrumental Variables

READINGS:

3. Pooling Cross-Section/Time Series Data Methods (Chapters 13, 14)
   a. Simple Panel Data Methods
      i. Pooled OLS
      ii. Difference-in-Differences
   b. Advanced Panel Data Methods
      i. Fixed Effects
      ii. Random Effects
      iii. Specification Tests
      iv. Dynamic Panel Data Models

READINGS:

**EXAM II**
PRESENTATION ARTICLES