

ECONOMICS 422 (WINTER 2012)

TAO CHEN

COURSE DESCRIPTION

Economics 422 is a topic course focusing on limited dependent variable models. The objective of this course is to introduce students to different estimation techniques that are widely used in modern empirical research in the presence of limited dependent variable. The prerequisite is Economics 321 or an equivalent course from another department. The overall grade will be based on a midterm and a term project.

TEXT

The recommended textbooks for this course are *Introductory econometrics: a modern approach* by Jeffrey Wooldridge (2009, South Western Cengage Learning), *Nonparametric regression and generalized linear models: a roughness penalty approach* by Peter Green and Bernard Silverman (1994, Chapman & Hall) and *Limited-dependent and qualitative variables in econometrics* by G. S. Maddala (1983, Cambridge University Press). We plan to cover the following topics:

- I. Mathematical preliminaries
 - (a) The idea of conditioning and conditional expectation
 - (b) Basic asymptotic theory
- II. General approaches to estimation and testing:
 - (a) Maximum likelihood
 - (b) Nonparametric regression
 - (c) Semi-parametric/Semi-nonparametric estimations
- III. Applications of II to limited dependent variable models

GRADING

The overall grade will be based on a midterm (50%), and a term project (50%). There will be no makeup for the midterm. If you miss it your term project will count for 100% of the grade. The term project is compulsory to pass the course.

CLASS TIME

Tuesday and Thursday 10:00–11:20 in PAS 2086.

EXAM

TBA

CONTACT INFORMATION

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- Office hours: Wednesday 2:30–4:00 or by appointment