ECONOMETRIA   (69 - 8337)

MASTER EN ECONOMÍA DE LA EMPRESA Y MÉTODOS CUANTITATIVOS

(Fecha Revisión: 19.09.2008)   **Curso Académico: 2008/2009**

Departamento de Estadística

> **OPTATIVA**
> **CURSO:** 1º
> **CREDITOS:** 5
> **CREDITOS ECTS:** 5
> **CUATRIMESTRE:** 2º
> **HORAS/SEMANA:** 3
>
> **PROFESOR COORDINADOR:** HELENA VEIGA

OBJETIVOS:

Models with discrete dependent variables and applications of panel data methods in all fields of economics have become increasingly important. This course starts with a brief review of concepts previously carried out in other courses of the program and focuses afterwards mainly on the methodological and empirical issues concerning the analysis of cross section and panel data in the specific context of economic models. Selected topics in time series analysis, especially topics of importance for the panel data analysis of dynamic models, will also be discussed. On satisfactory completion of this course, students will be provided with a number of sophisticated econometric tools which are of use in advanced empirical research or professional work.

PROGRAMA:

CHAPTER 1. ENDOGENEITY OF REGRESSORS
1.1 Stochastic regressors and properties of OLS estimators
1.2 Measurement errors in the variables
1.3 Simultaneous equation bias

1.4 Instrumental variables
1.5 Testing for endogeneity

CHAPTER 2. MODELS WITH DISCRETE DEPENDENT VARIABLES
2.1 Models for Binary Choice
2.2 Estimation and Inference in Binary Choice Models
2.3 Multinomial models
2.4 A Poisson model for count data

CHAPTER 3. LIMITED DEPENDENT VARIABLE MODELS
3.1 The truncated regression model
3.2 The censored regression (Tobit) model
3.3 Sample Selection

CHAPTER 4. PANEL DATA
4.1 Basic panel data models
4.2 Estimation and testing methods for random and fixed effect models
4.3 Limited dependent variable panel models
4.4 Dynamic models

CRITERIOS DE EVALUACIÓN:

The final mark of the course is based on:

- A final exam (60%)
- Two problem sets that will require theoretical and computational work (10%)
- A project (30%). The project consists of reproducing some empirical results of a published paper or a literature survey on a given topic.

BIBLIOGRAFÍA BÁSICA:

- Baltagi, Badi H., Econometric Analysis of Panel Data, John Wiley & Sons, 2008.
- C. Cameron and Trivedi, *Microeconometrics*, Cambridge University Press, 2005.
- F. Hayashi, *Econometrics*, Princeton University Press, 2000.
- J. Wooldridge, *Econometric Analysis of Cross Section and Panel Data*, MIT Press, 2002.
- M. Creel: *Econometrics*. Available at http://pareto.uab.es/mcreel/Econometrics/econometrics.pdf
- M. Arellano, *Panel Data Econometrics*, Oxford University Press, 2005.
- W.H. Greene, Econometric Analysis, Prentice-Hall, 2008.