Lectures: Mon 15:30-17:00, Wed 9:30-11:00.
Exercises: Wed 11:30-13:00 conducted by Tincho Almuzara almuzara@cemfi.edu.es
Workshop (Almuerzos): 13:15-15:00 on weeks 6 (Thu), 8 (Mon), and 10 (Wed).

Grades will be based on class exercises (20%), presentation (20%), and final exam (60%).

Textbooks

Course outline and readings

1. Generalized method of moments and optimal instruments

   1.1 Instrumental variables.
   1.2 General formulation.
   1.3 Testing overidentifying restrictions.
   1.4 Optimal instruments.

   Class Notes:
   *Generalized Method of Moments and Optimal Instruments*
   *GMM with Nonsmooth Moments*

   Arellano, Appendices A and B.
   Wooldridge, Chapter 14.

2. Linear panels

   2.1 Within-groups.
   2.2 Error in variables.
   2.3 Predeterminedness and dynamics.
   2.4 Random coefficients.

   Class Notes:
   *Linear Panels and Random Coefficients*
   *Static Panel Data Models*
   *Dynamic Panel Data Models I and II*
3. Discrete choice

3.1 Binary models.
3.2 Multinomial models.
3.3 Endogeneity and control functions.
3.4 Binary endogenous regressors.

Class Notes:
*Binary Models with Endogenous Explanatory Variables*
*LATE in Binary Choice*

Cameron and Trivedi, Chapters 14, 15.
Wooldridge, Chapter 15.

4. Duration models

4.1 The hazard function. Proportional hazard models.
4.2 Unobserved heterogeneity versus state dependence.
4.3 Discrete time duration models.
4.4 Interdependent durations.

Class Note: *Duration Models*

Cameron and Trivedi, Chapters 17, 18, 19.
Wooldridge, Chapter 19.

5. Endogenous selection and treatment effects

5.1 Tobit models.
5.2 Sample selection models.
5.3 Roy models.
5.4 Local and marginal treatment effects.

Class Notes:
*Tobit and Selection models*
*Econometric Methods of Program Evaluation*

6. Quantile methods

5.1 Medians, quantiles and optimal predictors.
5.2 Quantile regression.
5.3 Asymptotic results.
5.4 Censored quantile regression.

Class Note: *Quantile Methods*