Advanced microeconometrics:
(Raffaele Miniaci: 9 h lectures + 6 h tutorials)

Object
The availability of microeconomic panel data is now widespread, and the techniques to deal with the endogeneity issues and with limited dependent variables are becoming essential components of the toolkit of any empirical economist.

The course provides students with the necessary skills to use linear models for panel data using estimation strategies consistent with the exogeneity assumptions suggested by the economic theory. Furthermore, it illustrates how to specify, estimate and interpret the results of models for limited dependent variables in the case of longitudinal data.

The course gives importance to both econometric methods and to their applications in various fields, with examples from household economics, corporate finance or experimental economics. Tutorials and laboratory sessions with Stata complete the course.

Structure and assessment
The course is structured in three modules, each with a 3-hour lecture and 2-hour tutorial
The assessment involves:
(i) a project: student writes an empirical paper on a topic of his/her choice for which the techniques used in the course are relevant. Students willing to attend the course are kindly invited to inform me before the beginning of the lectures about their possible topic of interest. The project contributes to 70 percent of the final mark;
(ii) a written exam: students are asked to use and to comment estimation results and to answer more “theoretical” questions. The exam does not ask for formal proofs of theoretical results, it rather assesses the ability to use the appropriate techniques in different research contexts.

Course outline
- GMM estimators for linear panel data
- Models for binary variables with panel data
- Tobit, selection and count data models with panel data

Main References