

## Microeconometrics

**ECTS** : 6

### **Description du contenu de l'enseignement :**

This course focuses on micro-econometrics techniques based on temporal data (cross-sectional and panel) and qualitative dependent variables. The first part will explore possible sources of OLS bias and discuss techniques and estimators to address those biases ( micro-econometrics techniques for temporal data, such as first difference, random effects, fixed effects and difference-in-differences estimators). Non-linear models (Probit, Logit models), as well as selection models (Tobit, Heckman selection models) will be the focus of the second part of the course, as well as the instrumental variable estimator. The main themes are presented under a theoretical perspective, accompanied by empirical applications on Stata.

### **Compétence à acquérir :**

At the end of the course the students will master the main micro-econometrics techniques for probability models and temporal data and they will be able to critically analyze applied work that employs these types of estimators.

### **Mode de contrôle des connaissances :**

Students will be evaluated in two steps. They will present in pairs a scientific paper among a list provided by the teacher. This will be the same paper to be replicated for the Database and Stata Programming course. The presentation will count for 30% of the final note. The rest of the note will be based on a final written exam scheduled in the exams' week.

### **Bibliographie, lectures recommandées :**

List of scientific papers for students' presentations will be provided at the beginning of the course.

Selected chapters from:

1. Wooldridge, J. (2002) "Econometric analysis of cross-section and panel data", MIT Press, Cambridge.
2. A. Colin Cameron and Pravin K. Trivedi (2005), "Microeconometrics: Methods and Applications", Cambridge University Press

All slides, datasets, papers and other materials will be available on the MyCourse webpage.