UNIVERSITÉ DE NAMUR

FACULTÉ
DES SCIENCES ÉCONOMIQUES,
SOCIALES ET DE GESTION

LECON2826-Applied Econometrics

Professor: GELADE Woute

Semester :1st

Credits: 5 ECTS

Objectives

The course proposes an up-to-date presentation of methods to model, analyze and test continuous, discrete and partially observed (censored or truncated) cross section and panel data models. It also gives a short introduction to time-series models.

This is a course in "Applied" econometrics. This does not imply that it does not cover the theoretical aspects of the different methods. However, the theoretical part focuses on a good understanding of the assumptions that are likely to be important in applied analyses. The objective of the course is to prepare the student to perform useful analyses by choosing the appropriate methods, correctly interpreting the results and critically examining the limitations of these methods.

The topics that are covered are a combination of topics typically covered in introductory and more advanced courses in econometrics. While some background in econometrics is helpful, the course is also open to students without prior knowledge of econometrics.

Content

Specifically, the course covers the following topics:

1) OLS and IV: A revision of linear regression, instrumental variables, specification tests.

2) Estimation methods: Maximum likelihood, bootstrap.

3) Categorical dependent variables: Binary choice models (linear probability model, logit/probit, complentary log-log), ordered and multinomial logit.

4) Limited dependent variable and selection models, truncated/censored data, tobit models. Heckman models

5) Panel data: Pooled, random and fixed effects, testing across different models, dynamic panel, diff-in-diff.

6) Introduction to time-series

Teaching methods

The course consists of lectures and tutorials. During the tutorials, you make exercises and the methods are further illustrated through examples. Finally, there is a homework in which you need to adress a research question by analyzing the data and choosing the appropriate methods.

Evaluations

The evaluation consists of two parts. 1) A homework in which the student needs to define a research question, find an appropriate database and apply the appropriate techniques to answer the research question (30%). 2) A written exam (70%).