UCLouvain

lecge1316

2023

Econometrics

5.00 credits	30.0 h + 15.0 h	Q1

Teacher(s)	Beine Michel (compensates Dejemeppe Muriel) ;Dejemeppe Muriel ;
Language :	French
Place of the course	Louvain-la-Neuve
Prerequisites	*The prerequisite(s) for this Teaching Unit (Unité d'enseignement – UE) for the programmes/courses that offer this Teaching Unit are specified at the end of this sheet.*
Main themes	The course covers the basic instruments of econometric analysis at an intermediate (for subjects introduced in previous courses) or introductory level (for new subjects). Examples of how these methods are applied to management problems are given. An important aspect of the course is learning econometric modelling: students are taught how to take a theoretical, abstract and general relation between variables and apply it to the formulation and estimation of a particular concrete form that relation might take in a given context. They will also be introduced to econometric software during the course.
Learning outcomes	**At the end of this learning unit, the student is able to :** 1 This course is intended to give students a background in the theory and practice of Econometrics. The emphasis is on understanding the methods and their relevance to the solution of management problems. By the end of the course, students should be able to use these methods for simple question solving and to interpret the results of an econometric analysis while being aware of the limitations of the methods.
Evaluation methods	The exam consists in a written exam in English on 20 points. The exam can be taken in January 2021 and/or August 2021. *If the health situation deteriorates, this evaluation method may evolve into an exclusively online evaluation.*
Teaching methods	The non-French speaking students are expected to learn the course content by themselves based on the reference book in English (see below). For these students, two sessions of practical work with STATA (in English) are organized in a computer room or online during the quarter. Students are invited to learn the STATA software online at the beginning of the quarter.
Content	**Regression analysis with cross-sectional data** Chapter 1. General introduction Chapter 2. The simple regression model Chapter 3. Multiple Regression Analysis: Estimation Chapter 4. Multiple Regression Analysis: Inference Chapter 5. Multiple Regression Analysis: OLS Asymptotics Chapter 6. Multiple Regression Analysis: Advanced issues Chapter 7. Multiple Regression Analysis with qualitative information Chapter 8. Multiple Regression Analysis: Heteroscedasticity Chapter 9. Multiple Regression Analysis: Specification and data issues + Introduction to the statistical software STATA
Inline resources	See Moodle UCL (http://moodleucl.uclouvain.be/).
Bibliography	Livre de référence (reference book) : Jeffrey Wooldridge (2016), *Introductory Econometrics: A Modern Approach*, <u>6th Edition</u>, Cengage Learning.
Other infos	Prerequisites: 1) Mathematics in economics and management 2) Statistics in economocmis and management
Faculty or entity in charge	ESPO

Programmes containing this learning unit (UE)

Program title	Acronym	Credits	Prerequisite	Learning outcomes
Minor in Economics	MINECON	5		🔍
Bachelor in Philosophy, Politics and Economics	PPE1BA	5	LECGE1112 AND LECGE1114	🔍
Bachelor in Economics and Management	ECGE1BA	5	LECGE1112 AND LECGE1114	🔍
Mineure en statistique et science des données	MINDATA	5		🔍
Master [120] in Agriculture and Bio-industries	SAIV2M	5		🔍