UCLouvain

lecge1337

2021

Advanced mathematics and foundations of econometrics

5.00 credits	30.0 h + 15.0 h	Q2

Teacher(s)	Lefèvre Françoise ;
Language :	French
Place of the course	Louvain-la-Neuve
Learning outcomes	
Evaluation methods	Session 1 : Control in two parts • Part I : continuous assessment (/14 points) • average of 3 notes (i.e. 3 tests during certain class sections) • Part II : case study, group work (/6 points), work taken into account only if the average test score is # 7/20. Session 2 : Individual written exam (with non-annotated form and statistical tables and a simple pocket calculator -non graphical and without full alphanumeric keyboard). In the event of a change in health conditions towards a code orange or red, the evaluation can be organized remotely via a computer software provided to teachers and students by the university institution. The technical conditions of this evaluation related to the software will be specified to you at the moment the state authorities will have decided the sanitary conditions for the university institutions in case of evolution.
Teaching methods	• Lectures • Case study • Exercices by groups Teaching is organized on-site, but could be remotely in the event of changes in health conditions.
Content	Contents : • Modelisation in management • Simple linear regression by ordinary least squares (OLS) : estimation and inference • Multiple linear regression (MLR) by OLS : estimation and inference • MLR with qualitative information • Specification, selection, stability and prevision in MLR • The normality assumption of the MLR model • Heteroscedasticity • Multicolinearity.
Inline resources	Available on Moodle
Bibliography	• Supports de prise de notes (transparents) et forums sur la plateforme Moodle (slides and forums on the platform (Moodle). Ouvrages de références (à titre d'exemple) : • WOOLDRIDGE, J. (2013). Introductory Econometrics: A Modern Approach, 3th ed. South Western College Publishing., traduction française (2018) Introduction à l'économétrie : une approche moderne. De Boeck Supérieur. • GREENE W.H. (2002). Econometric Analysis, Prentice Hall. • JOHNSTON J. & DINARDO J. (1999). Méthodes Econométriques, Economica, traduction de JOHNSTON J. & DINARDO J. (1997). Econometric Methods, 2th ed. Mc GrawHill.
Faculty or entity in charge	ESPO

Programmes containing this learning unit (UE)

Program title	Acronym	Credits	Prerequisite	Learning outcomes
Master [120] in Law [Double Degree Law-Management: for Bachelors in Law]	DROI2M	5		🔍