

Course Descriptions Master 2020-2021

Course Title	Empirical Econometrics 1
Course Code	EBC4184
ECTS Credits	6,5
Assessment	Whole/Half Grades

Period	Start	End	Mon	Tue	Wed	Thu	Fri
1	31-8-2020	16-10-2020	X		X		

Level	Advanced
Coordinator	Pierre Mohnen For more information:p.mohnen@maastrichtuniversity.nl
Language of instruction	English
Goals	The purpose of this course is to review and discuss a number of econometric and statistical techniques that are essential for empirical research in economics.
Description	<p>PLEASE NOTE THAT THE INFORMATION ABOUT THE TEACHING AND ASSESSMENT METHOD(S) USED IN THIS COURSE IS WITH RESERVATION. THE INFORMATION PROVIDED HERE IS BASED ON THE COURSE SETUP PRIOR TO THE CORONAVIRUS CRISIS. AS A CONSEQUENCE OF THE CRISIS, COURSE COORDINATORS MAY BE FORCED TO CHANGE THE TEACHING AND ASSESSMENT METHODS USED. THE MOST UP-TO-DATE INFORMATION ABOUT THE TEACHING/ASSESSMENT METHOD(S) WILL BE AVAILABLE IN THE COURSE SYLLABUS.

The course would be devoted to techniques that are mainly used in microeconomic studies, labour economics, technology, industrial Organization. The emphasis will be on the understanding of the fundamentals behind the techniques used, their applicability, empirical relevance, economic interpretation, their limitations, both from an empirical and methodological point of view. Each topic will be illustrated by empirically papers published in a leading economic journal illustrating the use of the techniques.</p>

The students will work on empirical paper(s)/project(s) to learn the applications of the techniques and models discussed. The econometrics/statistical package that will be mainly used through the course is STATA.

List of possible topics that will be discussed during the course:

- * Causal models, OLS, IV
- * Binary outcome models (logit, probit ...)
- * Unobserved heterogeneity
- * Multinomial models
- * Tobit and selection Models
- * Treatment Effect causal models, policy evaluation, regression discontinuity, ...
- * Survival analysis and transition analysis
- * GMM estimation of intertemporal models in microeconomics
- * Count data models, poisson regression models

Literature	<p>Cameron, A.C. and P. K. Trivedi (2005), Microeconometrics: Methods and Applications, (Cambridge University Press, Cambridge) .</p> <p>Angrist, J.A. and J.S. Pischke (2009), Mostly Harmless Econometrics, (Princeton University Press, Princeton).</p> <p>Greene, W.H. (2007) Econometric Analysis, (Prentice Hall, New York).</p> <p>Wooldridge, Jeffrey M. (2011), Econometric Analysis of Cross Section and Panel Data, 2nd edition (MIT Press, Cambridge).</p> <p>Empirical papers from leading economic journals.</p>
Prerequisites	We assume that the students entering the Research master and following this course have at least a level comparable to the IES bachelor course Empirical Econometrics; have a good working knowledge of matrix algebra, of integrals calculus and are familiar with concepts from probability theory and mathematical statistics.
Teaching methods	PBL / Presentation / Lecture / Assignment / Groupwork
Assessment methods	Participation / Written Exam / Oral Exam
Evaluation in previous academic year	For the complete evaluation of this course please click http://iwio-sbe.maastrichtuniversity.nl/rapporten.asp?referrer=codeUM

This course belongs to the following programme / specialisation	Master Business Research - No specialisation	Year 2 Methodology Elective(s)
	Master Business Research - Operations Research	Year 1 Elective Course(s)
	Master Business Research - Operations Research	Year 2 Elective Course(s)
	Master Economic and Financial Research - No specialisation	Year 1 Compulsory Course(s)