Course Descriptions None 2021-2022

Course Title	Econometric Methods II
Course Code	EBC2120
ECTS Credits	6,5
Assessment	Whole/Half Grades

Period

Period	Start	End	Mon	Tue	Wed	Thu	Fri
4	31-1-2022	25-3-2022			X	X	

Level	Intermediate/Advanced
Coordinator	Martin Schumann For more information:m.schumann@maastrichtuniversity.nl
Language of instruction	English
Goals	(1) Thorough understanding of standard econometric models and methods for the analysis of independent data; independent data are typically cross-sectional, as opposed to time series which are sequential and generally serially dependent. (2) Additionally, some practical experience with the application of the methods, the interpretation of the models, and the evaluation of inferences. (3) In particular, providing background and warming up for students about to write a Bachelor thesis on an empirical topic.
Description	The course is designed as a follow-up to the second-year course Econometric Methods I (EBC2111), reviewing known methods somewhat more formally before introducing the new ones. The following topics will be covered. (1) The Normal regression model and Maximum Likelihood (ML) (2) Endogeneity and Instrumental Variable (IV) methods (3) Generalised Method of Moments (GMM) (4) Discrete choice models (LPM, logit, probit etc.) (5) Censoring and selection (tobit, heckit) (6) Linear equation systems (SURE, SEM) (7) Panel data models (POLS, FE, RE, FD ...). These topics will be treated at a fairly rigorous level, starting from abstract assumptions about a multivariate world described in terms of vectors and matrices.
Literature	Hansen, Bruce E. (2018): Econometrics, University of Wisconsin webpage http://www.ssc.wisc.edu/~bhansen/econometrics/ Greene W.H. (2008): Econometric Analysis, 7th edition, Pearson Prentice Hall. Davidson R. & J.G. MacKinnon (2004): Econometric Theory and Methods, Oxford University Press. Wooldridge J.M. (2010): Econometric Analysis of Cross-Section and Panel Data, 2nd edition, MIT Press, Cambridge, MA. (First half). Cameron A.C. & P.K. Trivedi (2005): Microeconometrics, Cambridge University Press. (First half).
Prerequisites	Linear algebra, mathematical statistics (EBC2107), Econometric Methods I (EBC2111) or the equivalent. Familiarity with statistical software like Stata or EViews and R.
Teaching methods	PBL / Presentation / Lecture / Assignment / Groupwork / Skills
Assessment methods	Final Paper / Attendance / Participation / Written Exam / Assignment
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

Bachelor Econometrics and Operations Research	Year 3 Core Course(s)
Bachelor Econometrics and Operations Research	Year 3 Elective Course(s)