



## **Master of Economics**

Lecture Title:	Econometrics I		
Lecturer:	Justinas Pelenis		
Lecture Code:	017 912	ECTS:	6
Term:	Winter term 2014	Contact hours:	40
Lecture Dates:	Jan 7 <sup>th</sup> – March 25 <sup>th</sup> , 2014		
Final Exam:	TBA	Frequency of lecture:	Twice a week
Prerequisites:	Mathematics I, Statistics I		
Language of instruction:	English		
Contact information	Justinas Pelenis Institute for Advanced Studies Room N-309 Stumpergasse 56 1060 Wien Telephone: 1 59991 143		
Office hours	-		
Course website	http://elaine.ihs.ac.at/~pelenis/teaching.html		
Learning Objectives: (What are the intended learning outcomes? Which skills will be acquired?)	The key goal of the course is to develop a detailed understanding of the linear regression model and its applications to economics analysis.  Furthermore, introduction to asymptotic theory, instrumental variables, generalized method of moments and maximum likelihood topics will be provided. A set of empirical exercises will be designed to further the potential usefulness of econometric methods to economic analysis.		
Content: (Which professional competence and which contents will be imparted?)	The course will cover the following topics: conditional expectation and projection, least squares regression, asymptotic theory for least squares, hypothesis testing, heteroscedasticity and generalized least squares, endogeneity, instrumental variables, generalized method of moments, limited dependent variables, maximum likelihood.		
Teaching Approach: (Description of the learning and teaching methods)	The course consists of we including empirical exercise	•	n set assignments
Workload: (Definition of workload (ECTS), divided in pre- modules (e.g. pre- readings), core-modules (contact hours), post- modules (e.g. case	Department of Economics and Finance		





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studies)):			
Required literature:	Bruce E. Hansen (2013), "Econometrcis"		
(scripts, books, articles, cases, papers)	http://www.ssc.wisc.edu/~bhansen/econometrics/Econometrics.pdf		
	Paul A. Ruud (2000), "An Introduction to Classical Econometric Theory", Oxford University Press.		
Recommended	Fumio Hayashi (2000), "Econometrics", Princeton University Press.		
literature: (books,			
articles, cases, papers)	Joshua D. Angrist and Jorn-Steffen Pischke (2009), "Mostly Harmless		
	Econometrics – An Empiricist's Companion", Princeton University Press.		
Special features:			
(e.g. excursion, guest speaker):			
Mode of	The grade will be determined by a combination of written exams and take-		
<b>examination</b> : (Mode of examinations and tests	home assignments.		
(e.g. oral or written			
examination, lecture,			
homework, papers, class participation)):			
Grading:	Class participation, practice sessions, homework assignments: 20%		
	Midterm exam: 25%		
	Final written exam: 35%		
	Empirical project: 20%		