

COURSE SYLLABUS

Doctoral course: Econometrics II, 7.5 credit points

Jönköping International Business School, January-May, 2019

Purpose:

This is an intermediate level Ph.D. course in econometrics dealing mainly with a range of topics including panel data, discrete choice, limited dependent variables and time series models. The goal of the course is to provide participating Ph.D. students in economics and statistics programmes with an overview of advanced econometrics used in research.

The course has several main objectives. The first is to build on the first course in econometrics by providing an extended up-to-date knowledge in the use of the methodology. The second is to provide an overview of the recent developments in the literature related to the topics listed above. The third is to provide an overview of ways to tackle methodological issues that arise when doing research on panel data, qualitative and time series models and development and application of the methodology. Numerous applications from the literature will be considered. Finally, an additional purpose is to help the students to identify possible thesis topics and to prepare them for conducting original research in the field.

Intended learning outcomes:

On completion of the course, the students will be able to: demonstrate a broad knowledge of the development in the field of econometrics as a subject and its applicability and practice, demonstrate familiarity with methods used within the field of econometrics, i.e. modelling, estimation, testing, inference and analysis of results, demonstrate the ability to engage in scholarly analysis, presentations and discussions within the field of econometrics, demonstrate skills in performing econometric analysis, critically evaluate key contributions to the literature and demonstrate deeper insight into the potentials and limitations of econometrics in evaluations, critically analyze the relevance and contributions of contemporary perspectives to econometrics, and critically and independently evaluate own and colleagues' assignments

Content:

The course is organized in eight sessions each lasting 5 hours. The course is divided into three main parts:

Part I – Generalized Regression Models: systems of equations and models for panel data.

Part II – Cross Sections, Panel Data and Microeconometrics: discrete choice, event count and limited dependent variable models.

Part III – Time Series and Macroeconometrics: serial correlation and nonstationary data

The course will include computer exercises using STATA or LIMDEP.

Type of Instruction:

Lectures, computer assignments, course paper preparation, seminar presentation.

Prerequisites:

Admitted to a doctoral programme in economics, statistics or equivalent in a recognized university and having completed at least one Ph.D. course in statistics and/or econometrics, and having completed a course in matrix algebra.

Examination and grades:

The course is assessed through: (i) home assignments covering the main parts of the course, (ii) authoring an essay (6,000-8,000 words) that uses advanced econometric methods and is preferably part of the participants PhD thesis, (iii) presentation of the essay at a seminar. The home assignments, essay and its presentation each need to be passed in order to pass the course. A course evaluation will be conducted at the end of the course.

Literature:

The course material consists of textbooks and journal articles covering all aspects of the course contents. The list of course material will be supplied prior to the start of the course.

Main textbook: William H. Greene: “Econometric Analysis”, 7th Edition or later, Pearson, 2012.

Additional reading material: A complete list of journal articles will be supplied prior to the start of the course.

Additional information:

Additional information will be provided continuously.

Instructor:

Almas Heshmati, Jönköping International Business School, E-mail: almas.heshmati@ju.se

Type of Instruction/Teaching format:

**Course schedule: Econometrics II,
Jönköping International Business School, Spring Semester 2017**

Lecture	Date*	Time*	Room	Topic	Notes
L1	Mon 14/01	10:00-15:00		System of Equations	Chapter 10 and articles
L2	Tues 15/01	10:00-15:00		Models for Panel Data	Chapter 11 and articles
L3	Mon 28/01	10:00-15:00		Discrete Choice Models	Chapter 17 and articles
L4	Tues 29/01	10:00-15:00		Discrete Choices and Event Counts	Chapter 18 and articles
L5	Mon 11/02	10:00-15:00		Limited Dependent Variables	Chapter 19 and articles
L6	Tues 12/02	10:00-15:00		Limited Dependent Variables	Chapter 19 and articles
L7	Mon 25/02	10:00-15:00		Time Series Serial Correlation	Chapter 20 and articles
L8	Tues 26/02	10:00-15:00		Time Series Non-stationary Data	Chapter 21 and articles
	Fri 5/04			Preliminary date for submission of home assignments	
	Fri 31/05	10:00-15:00		Preliminary date for seminar presentation of essays	

Note: Lecture (L). Date and time are temporary and can be changed in agreement with the participants. Room will be announced before the semester starts.