# AH2010 Econometrics II 7.5 credits

## Econometrics II

This is a translation of the Swedish, legally binding, course syllabus.

If the course is discontinued, students may request to be examined during the following two academic years

## Establishment

Course syllabus for AH2010 valid from Autumn 2010

## Grading scale

A, B, C, D, E, FX, F

## Education cycle

Second cycle

## Main field of study

## Specific prerequisites

A completed Bachelor's degree including at least 30 credits in mathematics/econometrics and documented proficiency in English B or equivalent (TOEFL, IELTS eg).
The basic course in econometrics (AH2002) or equivalent is recommended.

## Language of instruction

The language of instruction is specified in the course offering information in the course catalogue.

## Intended learning outcomes

The course provides a comprehensive treatment of economics using data on individuals, enterprises and simulated data as well. The course is oriented to practioner graduate students and researchers looking for necessary theoretical insights for proper pratical application. A good understanding of the linear regression model with matrix algebra from introductory course in econometrics is assumed, corresponding to Wooldridge: Introductory Econometrics; Hill, Griffiths Lim: Principles of Econometrics. Basic knowledge in statistical softwares such as STATA is required.

The course consider different core estimation methods such as least square, maximum likelihood, general method of moments, and semi- and non-parametric methods. The students will work with linear, non-linear, dynamic and count data models. The course will also introduce Stochastic Frontier Analysis, Data Envelopment Analysis and Treatment Effect Models.

## Course contents

- Basic linear panel-data models
- Extended linear panel-data models
- Nonlinear panel models
- Stochastic Frontier Analysis, Data Envelopment Analysis
- Treatment effect models

## Course literature

A.Colin Cameron and Pravin K. Trivedi: Microeconometrics Using Stata press, Revised Edition
Badi H.Baltagi: Econometric Analysis of Panel data. Forth Edition

## Examination

- TEN1 - Examination, 7.5 credits, grading scale: A, B, C, D, E, FX, F

Based on recommendation from KTH's coordinator for disabilities, the examiner will decide how to adapt an examination for students with documented disability.

The examiner may apply another examination format when re-examining individual students.

1. Assignment
2. Essay
3. Written exam
4. Active participation in seminar discussions

## Ethical approach

- All members of a group are responsible for the group's work.
- In any assessment, every student shall honestly disclose any help received and sources used.
- In an oral assessment, every student shall be able to present and answer questions about the entire assignment and solution.