SF2951 Econometrics 7.5 credits

Ekonometri

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 SF2951 valid from Autumn 2007

Grading scale

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

Education cycle

Second cycle

Main field of study

Specific prerequisites

SF1941 (5B1541) Probability Theory and Linear Models, or SF2940 (5B1540) Probability Theory.

Language of instruction

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

Intended learning outcomes

To pass the course, the student should be able to do the following:

- formulate an adequate linear model on the basis of a given problem, such as testing a hypothesis
- judiciously judge the validity of the specification of a linear model
- estimate the parameters of a linear model, interpret the results, and use the model for prediction and hypothesis testing
- give examples of and use tests for heteroscedasticity and use Whites standard errors, bootstrap and GLS
- use tests for auto correlated residuals
- give examples of and use methods for estimating models other than the standard linear model: 2SLS (instrument variables), GMM (General Method of Moments), ML-estimation
- give examples of and use simple auto regressive models, Logit and Probit models and other non-linear models and estimation methods for those

To receive the highest grade, the student should in addition be able to do the following:

- Combine all the concepts and methods mentioned above in order to solve more complex problems.

Course contents

Linear models and multivariate regression analysis, tests for mis-specifications, 2SLS, Whites standard deviations, non-linear models, ML-estimation, GMM, AR-models, Logit and Probit models.

Course literature

Will be determined later.

Examination

- PRO1 - Project, 1.5 credits, grading scale: P, F
- TEN1 - Examination, 6.0 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.

Other requirements for final grade

A written examination (TEN1; 6 university credits),
a project task (PRO1; 1,5 university credits.)

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.