EKHM85, Economic History: Applied Time Series Analysis, 7.5 credits

Ekonomisk historia: Tillämpad tidsserieanalys, 7,5 högskolepoäng

Second Cycle / Avancerad nivå

Details of approval

The syllabus was approved by The Board of the Department of Economic History on 2016-10-11 and was last revised on 2016-10-11 by Academic Director of Studies at Department of Economic History. The revised syllabus applies from 2017-01-16, spring semester 2017.

General Information

This is a course at the graduate level, which can become part of a Master of Science degree. The course provides a progression from the course EKHM62 Econometrics. It is optional at the second year at the master's programmes EAETU Economic Growth, Population and Development, EAUT Economic Development and Growth, EAISD Innovation and Spatial Dynamics and EAGCH International Economics with a Focus on China. It can also be studied as a single-subject course.

Language of instruction: English

Main field of studies	*Depth of study relative to the degree requirements*
Economic History	A1N, Second cycle, has only first-cycle course/s as entry requirements

Learning outcomes

On a general level the student will acquire advanced knowledge in the use of time series analysis techniques such as co-integration and panel data regression on economic problems.

More specifically, to pass the assessments students will:

Knowledge and understanding

- have a deeper understanding of panel data analysis with micro and macro data

- have a deeper understanding of univariate time series analysis in levels

- understand how unit root hypotheses are formulated and tested in univariate models

- have an understanding of multivariate time series analysis in levels

- have a deeper understanding of co-integration analysis

Competence and skills

- apply advanced econometric tools to economic problems using time series

- choose a suitable time series model to analyse a specific problem

- evaluate whether the assumptions made by the chosen model are reasonable

- apply rational modelling strategies even when basic assumptions must be rejected

- implement econometric analyses of time series using econometric software

- give an account of and discuss their abilities within time series analysis and the appropriateness of different time series methods for the analysis of economic problems

- pursue further studies in the subject and should be able to search for and evaluate information with a high degree of independence

- individually write an empirically orientated essay at the master level using time series methods

Judgement and approach

- be able to formulate and test the hypothesis of co-integration in both single equation and multivariate time series models

- be able to formulate and test hypotheses concerning the co-integration vector

- be able to generalise their knowledge to economic problems that haven't been treated during the course

- be able to understand relevant empirical and econometric research

Course content

The content of the course is delimited of both teaching and literature.

The course gives an introduction to basic concepts within panel data and time series analysis. Multivariate time series analysis is based on VAR models. Non-stationary time series are analysed using unit root tests, co-integration methods and VEC models. Theoretical studies are interwoven with practical applications in economic history and economic demography.

Course design

The course is designed as a series of lectures and computer exercises.

Assessment

Grading is based on individual performance on exercises and on written assignment. Written class room examinations will be offered at more than one occasion. All such exams will be assessed according to regular procedure.

The University views plagiarism very seriously, and will take disciplinary actions against students for any kind of attempted malpractice in examinations and assessments. The penalty that may be imposed for this, and other unfair practice in examinations or assessments, includes suspension from the University.

Subcourses that are part of this course can be found in an appendix at the end of this document.

Grades

Marking scale: Fail, E, D, C, B, A.

At the School of Economics and Management grades are awarded in accordance with a criterion-based grading scale UA:
A: Excellent
B: Very good
C: Good
D: Satisfactory
E: Sufficient
U: Fail

<u>Grade</u> (Definition). Characteristic

A (Excellent). A distinguished result that is excellent with regard to theoretical depth, practical relevance, analytical ability and independent thought.

B (Very good). A very good result with regard to theoretical depth, practical relevance, analytical ability and independent thought.

C (Good). The result is of a good standard with regard to theoretical depth, practical relevance, analytical ability and independent thought and lives up to expectations.

D (Satisfactory). The result is of a satisfactory standard with regard to theoretical depth, practical relevance, analytical ability and independent thought.

E (Sufficient). The result satisfies the minimum requirements with regard to theoretical depth, practical relevance, analytical ability and independent thought, but not more.

F (Fail). The result does not meet the minimum requirements with regard to theoretical depth, practical relevance, analytical ability and independent thought.

To pass the course, the students must have been awarded the grade of E or higher.

Students who do not obtain grades A-E on their written class room exam will be offered opportunities to retake the exam in which case the student will be assessed according to regular procedure. In the case of home exams that are handed in after the set deadline the teacher can: a) hand out a new exam which will be assessed according to regular procedure, b) may penalize the student by handing out a lower grade on the assignment in question unless the student can demonstrate special circumstances for the delay.

Entry requirements

Admission to this course is open for students on the master's programmes EAETU Economic Growth, Population and Development, EAUT Economic Development and Growth, EAISD Innovation and Spatial Dynamics and EAGCH International Economics with a Focus on China, as well as for Ph. D students in Economic History, who have passed the course EKHM62 Econometrics or elsewhere have acquired the equivalent knowledge.

Further information

This course was previously labelled EKHP07 and EKHM44 and cannot be included in the same degree as any of these Courses.

Subcourses in EKHM85, Economic History: Applied Time Series Analysis

Applies from V17

1601   Applied Time Series Analysis, 7,5 hp
       Grading scale: Fail, E, D, C, B, A