

GRADUATE SCHOOL

GM0719 Applied Econometrics, 7.5 higher education credits

Tillämpad ekonometri, 7,5 högskolepoäng Second Cycle

Confirmation

This course syllabus was confirmed by School of Business, Economics and Law on 2009-06-12 and was last revised on 2016-04-19 to be valid from 2016-04-19, autumn semester of 2016.

Field of education: Social Sciences 100%

Department: Graduate School

Position in the educational system

The course Applied Econometrics is a programme course included in the Master of Science programme in Economics at the Graduate School, School of Business, Economics and Law, University of Gothenburg.

The course can be part of the following programmes: 1) Master of Science in Environmental Management and Economics (S2EMA), 2) Program in Environmental Social Science (S1SML), 3) Programme in Logistics management (S1LOM), 4) Master of Science in Economics (S2ECO), 5) Master of Science in Finance (S2FIN) and 6) Programme in Business and Economics (S1HEG)

Main field of studies Specialization

Economics A1N, Second cycle, has only first-cycle

course/s as entry requirements

Entry requirements

To be eligible for the course Applied Econometrics the participant must fulfil the entrance qualifications for the Master of Science programme in Economics or the Master of Science in Finance.

Learning outcomes

After completion of the course, the student shall be able to:

- 1. identify an interesting research problem,
- 2. collect data that are relevant for the investigation of the problem,
- 3. understand both the theory and use of some of the most common econometric techniques,
- 4. select the technique that is most appropriate for the specific problem and data at hand.
- 5. formulate and test relevant economic hypotheses, and draw appropriate conclusions thereof,
- 6. generalize the knowledge obtained to econometric problems that have not been addressed during the course,
- 7. understand relevant econometric research.

Course content

The subject of this course is how to do econometrics and how to evaluate the econometric research of others. We will consider the selection and use of data to study a question, the design of an econometric model to fit a particular purpose, and the estimation and testing of that model. A large amount of lecture time will be devoted to formal presentation of commonly used estimation techniques, to which most students will have already been exposed in previous courses. However, unlike most courses in econometric theory, the presentation in the current course will be driven by a systematic investigation of specific research articles and extended examples from the econometrics literature. The usual approach will be to discuss (1) the economic, political, and policy issues that motivate the application, (2) the econometric techniques and issues related to the application, and (3) the results of the empirical analysis and what we can learn from them. For illustration, we will use STATA, the leading computer software for econometric analysis.

Some of the research questions that will be addressed are: Where should I begin, and how do I know if my problem is interesting enough? From where can I get data? Can I fit my regression by least squares, or do I need to use instrumental variables? Is it possible to use simulations in order to learn more about the performance of these estimators in my particular sample? What should I do if the dependent variable is binary? What if the data are trending? What if they have a panel structure? What kind of results should I include, and what are the conclusions that I can draw from them?

Form of teaching

Assessment

- 1. Research papers. These may be written individually or in groups, and account for 80% of the total grade.
- 2. An oral presentation of a specific research article. Again, the presentation may be done individually or in groups, and accounts for 20% of the grade.

Whether Assignments 1 and 2 are completed individually or in group, the overall performance of each student will be individually assessed.

If a student, who has failed the same examined component twice, wishes to change examiner before the next examination, a written application shall be sent to the department responsible for the course and shall be granted unless there are special reasons to the contrary (Chapter 6, Section 22 of Higher Education Ordinance).

In cases where a course has been discontinued or has undergone major changes, the student shall normally be guaranteed at least three examination occasions (including the ordinary examination) during a period of at least one year from the last time the course was given.

Students who have made five unsuccessful attempts to pass an examination have lost the possibility of obtaining a Master of Science Degree from Graduate School.

Grades

The grading scale comprises: Pass with Distinction (VG), Pass (G) and Fail (U). For Pass, it is required that Assignments 1 and 2 are completed with at least 50% of the total number of points that are possible. For Pass with Distinction, at least 75% of the points are required.

Course evaluation

The course will be evaluated upon completion. The results of the evaluation will be communicated to the students and will function as a guide for the development of the course.