UNIVERSITY OF GOTHENBURG

GRADUATE SCHOOL

GM0749 Applied Econometrics, 7.5 credits

Tillämpad ekonometri, 7,5 högskolepoäng

Second Cycle

Confirmation

This course syllabus was confirmed by Graduate School on 2022-03-28 to be valid from 2022-08-29, autumn semester of 2022.

Field of education: Social Sciences 100%
Department: Graduate School

Position in the educational system

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

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 programme in Finance. For programme specific entrance requirements, see programme syllabus.

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 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

The course contains lectures, computer labs and exercises, and oral presentations.

Language of instruction: English

Assessment

The learning outcomes will be assessed through assignments and an oral presentation of a specific research article.

Individual assignments shall be written individually, cooperation in formulating text, tables, figures etc. is not allowed.

The oral presentation is mandatory.

A failed assignment can be supplemented to a Pass grade.

If a student who has twice received a failing grade for the same examination component wishes to change examiner ahead of the next examination session, such a request should be made to the department in writing and should be approved by the department unless there are special reasons to the contrary (Chapter 6 Section 22 of the Higher Education Ordinance).

If a student has received a recommendation from the University of Gothenburg for study support for students with disabilities, the examiner may, where it is compatible with the learning outcomes of the course and provided that no unreasonable resources are required, decide to allow the student to sit an adjusted exam or alternative form of assessment.

In the event that a course has ceased or undergone major changes, students are to be guaranteed at least three examination sessions (including the ordinary examination session) over a period of at least one year, but no more than two years after the course has ceased/been changed.

The number of examinations is limited to five.

Grades

The grading scale comprises: Excellent (A), Very good (B), Good (C), Satisfactory (D), Sufficient (E) and Fail (F).

The grade (A-E) corresponds to the total score a student obtains on the assignments (80 % of final grade) and the oral presentation (20 % of final grade). To receive a pass grade (A-E) >= 50% points is required. The scale is tied to fixed score intervals:

A: 85-100%
B: 75-84%
C: 68-74%
D: 60-67%
E: 50-59%
F: <50%

Course evaluation

The course will be evaluated upon completion. The results of and possible changes to the course will be shared with students who participated in the evaluation and students who are starting the course.