



GRADUATE SCHOOL

GM1038 Financial Econometrics, 7.5 credits

Finansiell ekonometri, 7,5 högskolepoäng

Second Cycle

Confirmation

This course syllabus was confirmed by Graduate School on 2021-08-25 and was last revised on 2023-10-23 to be valid from 2024-01-15, spring semester of 2024.

Field of education: Social Sciences 100%

Department: Graduate School

Position in the educational system

The course Financial 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

Finance

Specialization

A1N, Second cycle, has only first-cycle course/s as entry requirements

Entry requirements

To be eligible for the course Financial 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

On successful completion of the course, the student will be able to:

1. understand some of the most commonly used econometric techniques within the field of financial economics
2. select the technique that is most appropriate for the specific problem and data at

hand

3. formulate and test relevant economic hypotheses, and to draw appropriate conclusions thereof
4. generalize the knowledge obtained to financial and econometric problems that have not been addressed during the course
5. understand relevant econometric and financial research.

Course content

Financial markets generate vast amounts of data, most of which are collected with some regularity over time. Take for example stock prices, where prices are typically recorded daily, and sometimes even more frequently. The fact that time series data of this kind have a natural ordering means that they are inherently dependent, a feature that requires special attention when doing econometric analysis. In fact, as indicated by the 2003 Nobel Prize awarded to the two time series econometricians Robert Engle and Clive Granger, it is not until recently that researchers have become aware of all the particularities of time series data.

In this course we study econometric time series techniques, as well as other relevant econometric methods, and their application to financial markets. Some of the questions that we will consider are: Are financial markets efficient? How can we model and analyze long-term relationships between prices and fundamentals? How can we explore the dependence of time series data when trying to forecast asset returns, and how can we model the risk of these returns?

The goal of the course is to provide the basic econometric tools needed to conduct an empirically oriented thesis, and to understand and criticize empirical research in finance. Most of the time will be devoted to formal presentation and discussion of commonly used econometric techniques and empirical problems in financial economics.

Form of teaching

Lectures, labs and tutorials.

Language of instruction: English

Assessment

Learning outcomes 1-5 will be assessed through a written individual exam.

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

A student who has taken two exams in a course or part of a course without obtaining a pass grade is entitled to the nomination of another examiner. The student needs to contact the department for a new examiner, preferably in writing, and this 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 special educational support, where it is compatible with the learning outcomes of the course and provided that no unreasonable resources are required, the examiner may 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 written exam. To receive a pass grade (A-E) $\geq 50\%$ 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.