

School of Economics and Management

NEKN86, Economics: Financial Risk Analysis, 5 credits

Nationalekonomi: Analys av finansiella risker, 5 högskolepoäng Second Cycle / Avancerad nivå

Details of approval

The syllabus was approved by The Board of the Department of Economics on 2016-10-04 to be valid from 2016-10-04, spring semester 2017.

General Information

This is a single subject master course in economics belonging to the "Financial Economics" specialisation. The course is either obligatory or optional within a number of master programmes at Lund University.

Teaching is in English. (Teaching may be in Swedish if all registered students have a good knowledge of Swedish).

Main field of studies Depth of study relative to the degree

requirements

Economics A1N, Second cycle, has only first-cycle

course/s as entry requirements

Learning outcomes

Knowledge and understanding

The goal of the course is to develop the students' understanding of models for financial risk management and their ability to apply these models to real word problem. More specifically, the students upon completion of the course shall have the ability to understand:

- VaR (Value-at-Risk),
- ES (Expected shortfall),
- Market risk,
- Credit risk,
- Basel regulations.

Competence and skills

Students shall have the ability to independently apply their knowledge to real world problems. In particular they shall be able to:

- implement methods for estimating VaR and ES,
- implement tests for evaluating the quality of VaR and ES estimators,
- implement methods for estimating credit risk,
- identify the finance-related problems in the real-world and to incorporate adequate methods and theories to analyse these problems,
- conduct a clear and pedagogical report of their own and others' empirical analyses.

Judgement and approach

Students shall have developed:

- learning skills that allow for further study in finance and economics,
- an ability to independently search for and evaluate information from risk management literature within finance,
- an ability to independently conduct a master thesis.

Course content

The objective of this course is to give the students an understanding and hands-on knowledge of fundamental methods within financial risk management. The course deals with two main topics: measurement and management of market risk and measurement and management of credit risk. The course begins with an overview of risk management in general with the Basel legislation as a real world backdrop. This is followed by a discussion of the theoretical properties of risk measures, in particular VaR (Value-at-Risk) and ES (Expected shortfall). The course continues with practical aspects and implementation of methods used to actually measure VaR and ES. This is followed by a general discussion of credit risk and to apply models to measure credit risk.

Course design

1. Teaching: Tuition consists of lectures and computer labs.

Assessment

- 1. Examination: Examination consists of a written examination that takes place at the end of the course. There will be further opportunities for examination close to this date. In addition, there are a number of compulsory computer exercises.
- 2. Limitations on the number of examination opportunities: –

The University views plagiarism and other academic dishonesty very seriously, and will take disciplinary action against students for any kind of attempted malpractice in connection with examinations and assessments. Plagiarism is considered to be a very serious academic offence. The penalty that may be imposed for this, and other unfair practices in examinations or assessments, includes suspension from the University for a specified period.

Grades

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

1. Grading: The official grading scale is A, B, C, D, E and Fail.

Grade (Definition), Points or percentage out of maximum points, Characteristic A (Excellent), 85–100, A distinguished result that is excellent with regard to theoretical depth, practical relevance, analytical ability and independent thought. B (Very good), 75–84, A very good result with regard to theoretical depth, practical relevance, analytical ability and independent thought.

C (Good), 65–74, The result is of a good standard with regard to theoretical depth, practical relevance, analytical ability and independent thought.

D (Satisfactory), 55–64, The result is of a satisfactory standard with regard to theoretical depth, practical relevance, analytical ability and independent thought. E (Sufficient), 50–54, The result satisfies the minimum requirements with regard to theoretical depth, practical relevance, analytical ability and independent thought, but not more.

U (Fail), 0–49, The result does not meet the minimum requirements with regard to theoretical depth, practical relevance, analytical ability and independent thought. Students have to receive a grade of E or higher in order to pass a course.

- 2. Weighting grades from different parts of the course: –
- 3. Grading scales for different parts of the course: –

Entry requirements

Students admitted to the Master Programmes in Finance are qualified for this course. For other students, at least 90 ECTS-credits in economics are required. These must include a course in basic financial economics, an intermediate course in microeconomics (e.g., NEKG21 "Intermediate Microeconomic Analysis"), and an intermediate course in econometrics (e.g., NEKG31 "Econometrics") or equivalent Courses.

Further information

- 1. Transitional regulations: –
- 2. Limitations in the period of validity: -
- 3. Limitations: This course may not be included in the same degree as NEK725 "Financial Valuation and Risk management", NEKM41 "Financial Valuation and Risk management", NEKN83 "Financial Valuation and Risk management" or TEK180 "Financial Valuation and Risk management".
- 4. Similar courses: -
- 5. Limitations in renewed examination: –