SF2942 Portfolio Theory and Risk Management 7.5 credits

Portföljteori och riskvärdering

This is a translation of the Swedish, legally binding, course syllabus.

Establishment

Course syllabus for SF2942 valid from Autumn 2012

Grading scale

A, B, C, D, E, FX, F

Education cycle

Second cycle

Main field of study

Industrial Management, Mathematics

Specific prerequisites

Passed courses in analysis in one and several variables, linear algebra, differential equations, mathematical statistics, numerical analysis

A passed course in Optimization is recommended

Language of instruction

The language of instruction is specified in the course offering information in the course catalogue.

Intended learning outcomes

The student should demonstrate a good understanding for the concepts and methods of the course and use this understanding to solve problems.

Course contents

Interest rate theory, bonds, term structures, immunization, financial derivatives, quadratic criteria for optimal hedging and investment, portfolio choice with utility theory, theory of risk measurement and the use of risk measures in portfolio analysis.

Course literature

Hult, Lindskog, Hammarlid and Rehn: Risk and Portfolio Analysis: Principles and Methods, Springer

Examination

- TEN1 - Examination, 7.5 credits, grading scale: A, B, C, D, E, FX, F

Based on recommendation from KTH's coordinator for disabilities, the examiner will decide how to adapt an examination for students with documented disability.

The examiner may apply another examination format when re-examining individual students.

If the course is discontinued, students may request to be examined during the following two academic years.

Other requirements for final grade

One written exam (7.5 university credits). Voluntary homework sets.

Ethical approach

- All members of a group are responsible for the group's work.
- In any assessment, every student shall honestly disclose any help received and sources used.
- In an oral assessment, every student shall be able to present and answer questions about the entire assignment and solution.