



AI2115 Financial Economics 7.5 credits

Financial Economics

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

Establishment

Course syllabus for AI2115 valid from Autumn 2007

Grading scale

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

Education cycle

Second cycle

Main field of study

The Built Environment

Specific prerequisites

Investment Analysis (AI1108).

Language of instruction

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

Intended learning outcomes

The course aims at providing the fundamental building blocks of portfolio theory, asset pricing and corporate finance as well as good understanding of the workings of financial markets and institutions.

The course should enable students to understand the link between risk, diversification, portfolio theory, pricing of financial assets and the cost of capital in capital budgeting and valuation of real assets. Furthermore, students should be able to use their theoretical knowledge in various empirical applications. Upon completion of the course students should:

- Understand the concept of diversifiable and non-diversifiable risk and how risk can be eliminated by portfolio diversification.
- Understand the link between portfolio diversification and equilibrium models of asset pricing such as the CAPM and the APT.
- Be able to use your theoretical understanding of asset pricing models in empirical applications such as estimating the cost of capital using the CAPM and the APT and be able to write a professional report of your analysis.
- Understand how dividend policy, investment policy and capital structure affect the value of a firm.
- Be able to apply your theoretical understanding of the interaction between financing and valuation of a project when constructing a valuation model and be able to use different methods for valuing real assets.
- Understand the meaning of efficient markets, the no arbitrage principle and how financial as well as real options are valued.

Course contents

Definition of risk from an economic perspective; Investors use of portfolio diversification to reduce risk; Asset pricing models and equilibrium rates of return; Dividend policy; Companies choice of capital structure; The interaction between financing and investment decisions; Valuation of debt securities; Valuation of options.

Course literature

Brealey, Myers & Allen, Corporate Finance, 8th international edition., McGraw Hill.

Examination

- PRO1 - Project, 3.0 credits, grading scale: P, F
- TEN1 - Examination, 4.5 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

Written examination (4,5 cr) and two course projects (3 cr).

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.