



# AH2005 Financial Economics 7.5 credits

## Financial Economics

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

## Establishment

Course syllabus for AH2005 valid from Spring 2011

## Grading scale

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

## Education cycle

Second cycle

## Main field of study

Industrial Management

## Specific prerequisites

A completed Bachelor's degree including at least 30 credits in mathematics/economics and documented proficiency in English B or equivalent (TOEFL, IELTS eg).

## Language of instruction

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

## Intended learning outcomes

From the perspective of investment theory, R&D has a number of characteristics that make it different from ordinary investments. Support for view in the form of economic- theoretic modelling will be studies in the course beginning with Schumpeter, Nelson and Arrow. The main argument is that the primary output of R&D investment is knowledge of how to make new goods and services, and this knowledge is nonrival: use by one firm does not preclude its use by another. To the extent that knowledge cannot be kept secret, the returns to the investment in it cannot be appropriated by the firm undertaking the investment, and therefore such firms will be reluctant to invest, leading to underprovision of R&D investment in the economy.

The main objective of the courses is to give the student theoretical insights in the problem of financing research and development activities in a free and competitive market-place. The student will be provided with theories on asymmetric information problems, moral hazard problems, and capital structure and R&D. The students will be familiarised with different types of security contracts used in financial transaction and differences between intangible and tangible investments.

## Course contents

- Liquidity Constraints
- Venture Capital
- Asymmetric information
- Choice under risk
- Incompleteness of contractual agreements
- Non rival goods

## Course literature

- Brealey, R, S. Myers and F, Allen, Corporate Finance, McGraw-Hill International Edition (2006).
- Additional papers and materials will be delivered by the course administration

## Examination

- ÖVN1 - Exercises, 1.5 credits, grading scale: A, B, C, D, E, FX, F
- TEN1 - Examination, 6.0 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**

Assignment, written exam

## **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.