

# AI1134 Capital Markets and Financial Instruments 7.5 credits

Kapitalmarknader och finansiella instrument

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

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

## Establishment

Course syllabus for AI1134 valid from Spring 2009

## Grading scale

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

## **Education cycle**

First cycle

## Main field of study

Technology

#### Specific prerequisites

For students not registrered on a KTH programme (180hp/300hp):

• completed upper secondary education including documented proficiency in English (IELTS, TOEFL et al) and university studies of at least 120 Swedish credits out of which 60 Swedish credits in Economics or business administration.

## Language of instruction

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

#### Intended learning outcomes

To provide students with a basic understanding of the role and nature of financial markets, institutions, and instruments, with emphasis on monetary economics and policy, the markets and valuation of common money, bond, equity, foreign exchange, and derivative securities. Learning outcomes: Upon completion of this course, the student should be able to- Describe what a financial system consists;- Describe distinctive features of a number of financial institutions, primary and secondary markets, and instruments;- Explain and analyze the role and functions of central banks and how central banks determine and set short interest rates;- Explain and analyze transmission mechanisms of monetary policy;-Describe and analyze monetary policy in different regions of the world, particularly in the EU region;- Describe how money can be defined;- Describe models of money supply and demand determination; - Describe theories of interest rate determination, and the structure of interest rates; - Apply standard valuation models to determine the value of bonds, stocks and options;- Compute the profits and payoffs of some popular strategies involving stock and stock options;- Describe the relationship between risk and return, and why diversification helps to reduce risk;- Price risk attaching to individual assets using the CAPM;- Apply basic statistical methods to compute risk and return of single assets as well as portfolios.- Discuss how monetary policy may affect the required rate of return and prices of debt and equity securities.

## **Course contents**

Financial system; primary and secondary markets; supply and demand of money; monetary policy; determination of interest rates; risk, return and diversification; Valution and markets of debt, equity, and derivative securities. Foreign exchange.

## **Course literature**

- Articles, will be announced at the beginning of the course.
- Ross, Stephen A.; Westerfield, Randolph W.; Jaffe, Jeffrey F. : Corporate finance. 6. ed., rev. pr. : - Boston, Mass. : McGraw-Hill/Irwin, cop. 2002 - xxiv, 932, 20 s. : ill. ISBN: 0-07-115088-9
- Z. Bodie & R. C. Merton. Finance. Prentice Hall. Latest version.

#### Examination

• TENA - 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.

## Other requirements for final grade

One written exam (TEN1; 3cr) and one term paper (INL1; 2cr).

## 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.