



Course syllabus

# Finansiell ekonomi Financial Management

EXTF45, 6 credits, G2 (First Cycle)

Valid for: 2023/24 Faculty: Faculty of Engineering, LTH Decided by: PLED I Date of Decision: 2023-04-14

## **General Information**

Main field: Technology. Compulsory for: 13, Pi4-fm Elective for: F4, F4-fm Language of instruction: The course will be given in Swedish

## Aim

The aim ofn the course is to give a generel introduction to the subject of financial economics, from a company perspective by studying corporate finance using financial assets and from a market perspective by creating an understanding for the functioning of financial markets and the pricing and risk management of financial assets. The course provides two perspectives on on finance, the perspective of the financier and the perspective of the borrower. The structure of the copurse is divided in terms of financial instruments and focus both on valuation of risky assets and on valuation of fixed income securities.

## Learning outcomes

*Knowledge and understanding* For a passing grade the student must

have knowledge and an understanding of:

- relevant concepts and models
- rate of return and risk premia for shares and share portfolios
- capital budgeting
- the choice of capital structure and how it affects the value of the company
- pricing of options

- dividends and the value of a company
- the pricing of fixed income securities inlcluding interest rate risk
- the financing on global markets including exchange rate risk and various instruments

#### Competences and skills For a passing grade the student must

### be able to:

- calculate payoff and the rate of return on shares
- calculate the cost of capital
- choose among and calculate various capital structures in companies and organisations, particularly regarding investment decisions
- determine the choice of capital structure for investments in different capital markets
- · decide dividends to company owners and its effect on the value of the company
- understand and price options
- · calculate the relations among interest rates of different duration and calculate interest rate risk
- use data to describe the connection between the national money market and the currency trade

#### Judgement and approach

For a passing grade the student must

be able to use established terminology and in a clear and concise manner communicate the forulation of problems, their solution and interpretation of quantitative models. After the course, students shall be able to independently seek and evaluate literature in the field.

### Contents

The course consists of two parts and eight segments:

- 1. valuation of risky assets
- a. risk, rate of return and portfolio selection
- b. capital budgeting
- c. efficient markets
- d. dividends, capital structure and options
- 2. valuation of fixed income securities
- a. pricing and interest rates
- b. risk management
- c. global markets and the currency market
- d. various instruments

### **Examination details**

Grading scale: TH - (U,3,4,5) - (Fail, Three, Four, Five) Assessment: Examination consists of a final exam and a laboratory assignment. Students must pass both the exam and the laboratory assignment to pass the course. After the laboratory session, a report must be handed in for evaluation. If it is

doubtful whether the laboratory report is sufficient, students are allowed to correct their report and hand it in for renewed evaluation. Laboratory reports can only be handed in in connection to the course and the re-exams. There are also optional online assessments throughout the course, which give bonus points for the final exam.

The examiner, in consultation with Disability Support Services, may deviate from the regular form of examination in order to provide a permanently disabled student with a form of examination equivalent to that of a student without a disability.

## Admission

### Admission requirements:

• FMS012 Mathematical Statistics, Basic Course or FMSF45 Mathematical Statistics, Basic Course or FMSF80 Mathematical Statistics, Basic Course

**The number of participants is limited to:** No **The course overlaps following course/s:** MIO140

## **Reading list**

- 2013, ISBN: 9780273792024.
- 2013, ISBN: 9780273792024. Berk, J. & DeMarzo, P.: Corporate Finance. 2nd edition, Pearson Addison Wesley, Boston 2013.

## **Contact and other information**

**Course coordinator:** Andreas Johansson, andreas.johansson@nek.lu.se **Course homepage:** http://www.nek.lu.se