



AI103V Investment Analysis 7.5 credits

Investment Analysis

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

Establishment

Course syllabus for AI103V valid from Autumn 2008

Grading scale

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

Education cycle

First cycle

Main field of study

Technology

Specific prerequisites

Prerequisites/eligibility: Completed upper secondary education including documented proficiency in English and 60 university credits of which 15 university credits in Economics.

Language of instruction

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

Intended learning outcomes

Course goals; The course should enable students to demonstrate ability to approach investment decision making in a rational and systematic manner by being able to:

- Identify and explain the basic steps in the investment process.
- Derive and understand the origin of the major formulas used in present value calculations.
- Evaluate different investment alternatives.
- Critically assess different investment criteria.
- Show how leverage affects investments.
- Identify major threats to an investment project's success.
- Explain how risk is defined, list different sources of risk, and how to quantify risk.
- Describe how diversification affects the risk of a portfolio.
- Use decision trees to describe real options imbedded in projects.
- Discuss problems of forecasting.
- Develop Excel spreadsheets for investment decision-making.
- Basically understand portfolio theory, the capital asset pricing model (CAPM) and arbitrage pricing theory (APT). The course should also enable students to work as part of a team of people with different backgrounds.

Course contents

Investment process; Capital budgeting; Present value mathematics; Discounted cash flow models; Investment decision making under uncertainty; Investment performances; Leverage; Risk and return on investments.

Disposition

Lectures (5-hours per week on average)

Class-room exercises (3-hours per week on average)

Computer based (spreadsheet) group project (2-hours per week on average)

Report presentation

Course literature

Brealey, R & Myers, S: Principles of Corporate Finance. McGraw-Hill (latest edition) Geltner, D & Miller, N: Commercial Real Estate Analysis and Investments

Equipment

None

Examination

- ÖVN1 - Exercise, 4.5 credits, grading scale: P, F
- TEN1 - Examination, 3.0 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.

Take-home assignments Investment analysis report Written exam

Other requirements for final grade

Take-home assignments Investment analysis report 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.