HU1001 Business Calculation and Decision Models 7.5 credits

Kalkyler och beslutsmodeller

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

Establishment

Course syllabus for HU1001 valid from Autumn 2016

Grading scale

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

Education cycle

First cycle

Main field of study

Technology

Specific prerequisites

The course ML1030, Industrial Economics and Organisation, or equivalent

Language of instruction

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

Intended learning outcomes

After completing the course, the student should be able to:

- Construct and solve an advanced short term calculation with some free capacity including two variables (products) and several constraints
- Write out and implement different kinds of cost allocations methods
- Construct models for investment decisions: Net Present Value, Annuity, and Internal Rate of Return
- Carry out a cost variance calculation
- Solve a computer aided linear model for optimizing, so-called Linear Programming
- Design problems and make decisions in the form and with the help of decision matrices and decision trees
- Divide a given company´s vision in a balanced scorecard where targets, crucial success factors and measures gives concrete meaning in daily personell activities
- Choose and justify for when different types of calculations are appropriate

Course contents

- Business calculations and decision models, here applied in an engineering reference environment
- Apply calculations in excel

Disposition

Lectures
Laboratory work

Course literature

Andersson, Göran, **Kalkyler som beslutsunderlag,** 2013, ISBN 9789144080963
Andersson, Göran, **Kalkyler som beslutsunderlag - övningsbok**, 2013, ISBN 9789144081380

Examination

- TEN1 - Written examination, 6.0 credits, grading scale: A, B, C, D, E, FX, F
- LAB1 - Laboratory Work, 1.5 credits, grading scale: P, 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

Passed examination (6 cr)
Passed laboratory work(1,5 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.