



HN2020 Work Environment Economics 7.5 credits

Arbetsmiljöekonomi

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

Establishment

Course syllabus for HN2020 valid from Autumn 2018

Grading scale

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

Education cycle

Second cycle

Main field of study

Technology and Health

Specific prerequisites

180 university credits (hp) in engineering or natural sciences, and documented proficiency in English corresponding to English B/English 6. 15 credits mathematics or statistics.

Language of instruction

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

Intended learning outcomes

The overall course aim is for the students to understand the relation between a good work environment and an organisation's operational and financial performance and results, and how good working conditions can contribute towards employee performance, health and well-being.

After the course, each student shall be able to:

- In their own words, describe and exemplify central terms and concepts of business and work environment economics
- Describe and reflect over methods and models used for analysing the effects of the work environment on an organisation's performance and results.
- Critically review and assess the factors that affects an organisations's results, and propose and argue for changes and interventions from a financial perspective, based on scientific literature.
- Summarise and present their findings, both orally and in writing.

Course contents

Lectures and seminars with theory and practical examples about:

- Central terms and concepts related to business economics, work environment economics and personnel economics
- Work environment economics in practice, workforce analytics, key performance indicators
- Work environment as a production factor, and the effects on operational productivity, efficiency and quality
- The consultative professional; reflecting and arguing for effects of ergonomics from a systems perspective

Project work where a workplace, task or work system is analysed to identify a problem and propose a suitable solution, based on relevant theory and best practice.

Course literature

Bohgard, M. (ed.) (2009). Work and technology on human terms. Stockholm: Prentice.

Berlin, C and Adams, C. (2017). The Economics of Ergonomics. In Production Ergonomics: Designing Work Systems to Support Optimal Human Performance. London: Ubiquity Press.

Additional articles and material will be handed out during the course.

Examination

- PRO1 - Project, 3.0 credits, grading scale: A, B, C, D, E, FX, F
- ÖVN1 - Exercises, 1.5 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.

Other requirements for final grade

PRO1 - Project, 3.0, grade scale: A, B, C, D, E, FX, F

TEN1 - Examination, 3.0, grade scale: A, B, C, D, E, FX, F

ÖVN1 - Exercises, 1.5, grade scale: P, F

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.