FME3552 Perspectives on Science in Industrial Economics and Management 7.5 credits

Perspektiv på vetenskap inom industriell ekonomi och organisation

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

Establishment

Course syllabus applies from Spring semester 2024 accourding to ITM School decision on 2023-12-07, M-2023-2540.

Grading scale

P, F

Education cycle

Third cycle

Specific prerequisites

Language of instruction

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

Intended learning outcomes

After passing the course, the doctoral student should be able to:

- present the basic issues and methods within philosophy of science.
- give an account of central schools in the scientific thinking.
- explain different central perspectives on knowledge.
- discuss and analyze the relevance of scientific theoretical problems for research in Industrial Economics and Management.
- give an account of central philosophical problems and methodological issues in Industrial Economics and Management.
- independently and critically discuss epistemological and ontological issues, and evaluate proposed solutions, in relation to own and others' research endeavors.

Course contents

- Scientificity
- Schools in scientific thinking
- Epistemology
- Different forms of knowledge in science and practice
- Ontology
- Scientific paradigms
- Language and concept formation
- Observations and measurements
- Hypothesis testing
- Deduction, induction, falsification
- Causality and correlation
- Generalizability
- The concept of theory
- Explanatory models: structure and actor
- Explanatory models: idealism and materialism
- Research ethics

Examination

- INL1 - Assignment, 4.5 credits, grading scale: P, F
- SEM1 - Seminars, 3.0 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.

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.