

Course Syllabus

Data-Driven Leadership 7.5 Credits*, Second Cycle

Learning Outcomes

The goal of the course is for students to develop awareness of what it is that prevents rational, data driven decisions and the attainment of collective objectives. Students are taught how to overcome such hurdles. Upon completion of the course, students will be able to:

- evaluate investment alternatives where data shortage, uncertainty, and monetary and non monetary metrics exist
- identify trade offs between exploring and exploiting data in decision-making situations
- reflect on their leadership traits, and their ability to communicate and give feedback in a group
- apply Mechanism Design to attain team objectives
- demonstrate professional judgement when selecting data acquisition strategies for a given data driven decision problems

Course Content

The course teaches theories and abstract concepts, and illustrates them in practical labs and experiments. The course starts with the problem of making an individual, rational investment decision and then reviews the contained concepts and the feasibility of obtaining estimates on the concepts. In this context, strategies for data acquisition and search cost are reviewed. The learnt concepts of utility and preferences are then generalised into collective decisions, and the information-sharing fallacy is identified. The fallacy is connected to game theoretical insights. Having conceptualised conventional hurdles in the attainment of collective decisions that satisfy the decision makers, Mechanism Design is introduced as a technology for achieving satisfactory solutions.

Throughout the course, students are assigned to a team, and the performance of the team and its members is monitored by each student by means of a self reflection report. Students' practical implementation of the theories is assessed, and feedback is provided in frequent team seminars.

Assessment

Written examination 2.5 credits, assignments and seminars 5 credits.

Forms of Study

Lectures, group and lab work, and seminars.

Grades

The Swedish grades U–VG.

The final grade for the course is based on an overall assessment by the examiner.

Prerequisites

Bachelor's degree in Statistics, Economics, Business Administration, Computer Science, Information Science or Informatics comprising at least 180 credits and English 6

Subject:

Microdata Analysis

Group of Subjects:

Other Interdisciplinary Studies

Disciplinary Domain:

Natural Science, 100%

This course can be included in the following main field(s) of study:

1. Microdata Analysis

Progression Indicator within (each) main field of study:

1. A1N

Approved:

Approved 1 March 2022

Valid from 1 March 2022