

# Thinking with Representations

Single subject and programme course

6 credits

Representationer som tänkande

769A03

Valid from: 2018 Spring semester

**Determined by**  
Course and Programme Syllabus Board  
at the Faculty of Arts and Sciences

**Date determined**  
2018-02-13

## Main field of study

Cognitive Science

## Course level

Second cycle

## Advancement level

A1X

## Course offered for

- Master Programme in Cognitive Science

## Entry requirements

Bachelor's degree, 180 ECTS credits, in the field of cognitive science, or Bachelor's degree, 180 ECTS credits, in the main field of computer science or equivalent and passed 30 ECTS credits courses in one or more of the subjects: psychology, linguistics, philosophy, neuroscience, anthropology or equivalent, or Bachelor's degree, 180 ECTS credits, in one of the main areas of psychology or neuroscience and passed 30 ECTS credits courses in computer science or equivalent. 12 ECTS credits in design, of which at least 6 ECTS credits at advanced level (eg 2 of the courses "Interaction Design 6 ECTS credits", "Advanced Interaction Design 6 ECTS credits", "Interaction Design Studio 6 ECTS credits").

## Intended learning outcomes

After completion of the course, the student shall on an advanced level be able to:

- apply basic concepts from distributed cognition,
- represent alternatives in a design space,
- reflect on the value of representations,
- use and develop tools and methods for representations, and reflect on what the tools enable and confine,
- describe and systematically reflect on how to represent complex situations on a detailed as well as holistic level.

## Course content

Ability and knowledge about what the roles of representations are in design, including the ability and knowledge to use different tools to plan and use representations is developed, by conducting a series of assignments. Literature from design and cognitive science is used to reflect on the process. Emphasis is put on reflecting in- and on action to further the understanding of mechanisms for learning with the help of representations and the connection between the built representation and the knowledge it makes available. More general implications for design of placing representation at the center of the design process is also considered in the course.

## Teaching and working methods

The course circles around a sequence of assignments and design work that are concluded with seminars and examination sessions. In addition, the student should conduct self-study.

## Examination

The course is examined through an individuell assignment, and a group assignment. Detailed informaton can be found in the course's study guide.

Students failing an exam covering either the entire course or part of the course twice are entitled to have a new examiner appointed for the reexamination.

Students who have passed an examination may not retake it in order to improve their grades.

## Grades

Three-grade scale, U, G, VG

## Other information

Planning and implementation of a course must take its starting point in the wording of the syllabus. The course evaluation included in each course must therefore take up the question how well the course agrees with the syllabus.

The course is carried out in such a way that both men's and women's experience and knowledge is made visible and developed.

## Department

Institutionen för datavetenskap