



IC1008 Cognitive Science 7.5 credits

Kognitionsvetenskap

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

If the course is discontinued, students may request to be examined during the following two academic years

Establishment

Course syllabus for IC1008 valid from Spring 2010

Grading scale

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

Education cycle

First cycle

Main field of study

Technology

Language of instruction

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

Intended learning outcomes

On successful completion of this course the student has:

Knowledge and understanding regarding:

- Be able to account for basic theories and assumptions that are made within a classic cognitive science, including decision making, risk judgement, language and language use
- Be able to account for criticism that is directed towards a classic cognitive science
- Be able to describe the influence the view on humans, and in a wider sense the view on research and design, has on the way we look upon and carry out design

Skills and capacities, to be able to:

- Analyze and reflect on basic theories within cognitive science
- Analyze and reflect on basic assumptions within a classic cognitive science as related to the criticism that is directed towards it
- Analyze a problem/research question based on theories within cognitive science and write a report about this in a scientific way

Values and attitudes, to be able to:

- Value and judge the relevance of cognitive science theories to the area human-machine interaction

Course contents

The course discusses basic concepts (questions and problems) within the area of cognitive science and their relevance to chosen areas within computer- and systems sciences. More specifically, the relevance of cognitive science as related to the areas of IT and learning, intelligent agents, social agents and more generally IT design. This includes concepts of representation, language, learning, knowledge, etc. A classic perspective on cognitive science is discussed and critiqued.

Disposition

Lectures and seminars. Besides scheduled activities, there will be individual work consisting of analysis, argumentation and writing of a scientific essay.

Specific prerequisites

Completed upper secondary education incl documented proficiency in Swedish B and English A or equivalent is required.

Course literature

Preliminary: Terry Winograd, Flores: Understanding Computer and Cognition, Addison-Wesley Publishing Company, 1998

Examination

- INL1 - Assignments, 3.0 credits, grading scale: A, B, C, D, E, FX, F
- TEN1 - Examination, 4.5 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.

Examination of the course consists of one individual task (writing of a paper) and a written exam, both graded according to the scale A/B/C/D/E/Fx/F.

Other requirements for final grade

Both the written exam and the individual task are graded according to the grades A/B/C/D/E/Fx/F. To pass the whole course (grade E) requires pass on both the written exam and the individual task. Deadline for the individual task is notified at the start of the course.

Grade for the whole course is weighed according to:

Grade A

Requires grade A on written exam and at least grade B on individual task, or
Requires grade B on written exam and grade A on individual task

Grade B

Requires grade B on written exam and at least grade C on individual task

Grade C

Requires grade C on written exam and at least grade D on individual task

Grade D

Requires grade D on written exam and at least grade E on individual task

Grade E

Requires grade E on written exam and at least grade E on individual task

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.