



IC2006 Cognitive and Social Science: HMI 7.5 credits

Cognitive and Social Science: HMI

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 IC2006 valid from Autumn 2008

Grading scale

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

Education cycle

Second cycle

Main field of study

Specific prerequisites

Basic HCI course (e.g., IC1000 or IC1007)

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:

Knowledge and understanding regarding:

- To be able to account for basic assumptions that are made regarding human action within a traditional cognitive science (for instance within cognitive psychology)
- To be able to account for critique that is directed towards a classic cognitive science and the assumptions that are made regarding human action
- To be able to account for analytically and socially oriented perspectives on human action (for instance Activity Theory and Distributed Cognition)
- To be able to account for analytically and socially oriented methodologies tailored at design and evaluation of interactive systems
- To be able to describe different foci- and levels of analysis in the design and evaluation of interactive systems

Skills and capacities to:

- Analyze and reflect on cognitive and social perspectives of action and their applicability in different contexts
- Choose and apply an appropriate theoretical framework given a certain problem
- Choose and apply appropriate methodology to investigate a certain problem
- Analyze, choose and apply appropriate foci- and levels of analysis given a chosen theoretical framework, methodology and problem
- Formulate, plan and conduct a study tailored at investigating interactive and communicative phenomena
- Write and report a study scientifically

Values and attitudes, to be able to:

- Value and judge the relevance of cognitive and socially oriented perspectives on human action to the area of human- machine interaction
- Value ethical aspects that are relevant to research within human-machine interaction research

The aim of this course is to give the student a theoretical and methodological base for designing and evaluating interactive systems. The course introduces concepts and methodologies both from socially oriented perspectives (e.g sociology) and from individual perspectives (e.g. cognitive psychology) on human action. By introducing different viewpoints on human action students will learn to understand the different levels of analysis (group vs individual) required for the understanding the design and evaluation of interactive systems.

Course contents

* cognitive science

* cognitive psychology

- * situated cognition, distributed cognition, and situated action
- * socio-cultural perspective
- * symbolic interactionism
- * ethno-methodology
- * conversation analysis

Course literature

To be decided. See also <http://www.dsv.su.se/utbildning/momentval.html>

Examination

- INL1 - Assignment, 3.0 credits, grading scale: A, B, C, D, E, FX, F
- INL2 - Assignment, 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.

Other requirements for final grade

INL 1; (3.0hp), INL 2, (4,5hp)

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.