

KOGP06, Cognitive Science: Cognition, Interaction and Design, 7.5 credits

Kognitionsvetenskap: Kognition, interaktion och design, 7,5 högskolepoäng
Second Cycle / Avancerad nivå

Details of approval

The syllabus was approved by The pro-dean for First-Cycle Studies at the Faculties of Humanities and Theology on 2010-03-19 and was last revised on 2025-09-08 by The Pro Dean of First and Second Cycle Studies at The Joint Faculties of Humanities and Theology (U 2025/628). The revised syllabus comes into effect 2025-09-09 and is valid from the spring semester 2026.

General information

The course is a component of the Master's programme in Cognitive Science. It is also offered as a freestanding course.

Language of instruction: Swedish

Main field of study

Specialisation

Cognitive Science A1N, Second cycle, has only first-cycle course/s as entry requirements

Learning outcomes

On completion of the course, students shall be able to

Knowledge and understanding

- explain theories of interaction and design, compare them and analyse when their use is appropriate
- illustrate concepts such as usability, epistemic actions and distributed cognition,

Competence and skills

- apply knowledge of usability to different instances of interaction
- analyse different instances of interaction using the theories presented in the course
- relate the different theories within interaction to each other and account for their strengths and weaknesses,

Judgement and approach

- assess different types of interfaces
- provide arguments for different theoretical approaches to interaction.

Course content

In principle, all cognitive activities take place in interaction with the surroundings. But how should such an interaction between individual and surroundings be understood? What happens when an individual performs a task using some kind of artefact or when several individuals coordinate with each other?

The course covers how cognitive processes in primarily biological systems take place through the systems' interaction with the physical and social environment. A particular focus is placed on cognitive processes such as memory functions, perception, thinking, problem-solving, creativity and decision making, how they develop in interaction with their environment and how they are supported and change in different situations. One fundamental question is how do you know that a complete cognitive system is functioning and when?

The lectures cover various influential theories of interaction, while the group assignments provide an opportunity to study the phenomena in reality and link them to the conceptual framework presented in the literature. The course is not a course in interaction design but aims to orientate students in the theoretical framework that underlies most of the approaches and schools of thought found in interaction design and elsewhere.

Course design

Teaching consists of lectures and seminars.

During the course, students conduct two empirical studies as group exercises. The group exercise is the basis for the reports written in groups and examined. A student who is unable to participate in the group exercise will have to do his/her own research and report.

Assessment

The assessment is based on two written reports and an invigilated exam.

The examiner, in consultation with Disability Support Services, may deviate from the regular form of examination in order to provide a permanently disabled student with a form of examination equivalent to that of a student without a disability.

Grades

Grading scale includes the grades: Fail, Pass, Pass with distinction

The final exam can give the grades Fail, Pass and Pass with Distinction. The group exercises can be graded Fail or Pass. To get a grade of Pass on the course, you need Pass on all parts of the examination. In addition, a grade of VG is required on the invigilated exam.

Entry requirements

To be admitted to the course, students must have successfully completed 90 credits in any of the following subjects: anthropology, general linguistics, computer science, informatics, engineering mathematics, neuroscience, biology, psychology, economics, education or theoretical philosophy. Students with qualifications equivalent to 90 credits in cognition research or cognitive science from another higher education institution may also be admitted to the course.

Further information

- The course is offered at the Department of Philosophy, Lund University.
- The credits allocated for course content that in whole or in part is commensurate with another course can only be credited once for a degree.
- For further details, see current registration and information materials.