

# Cognitive Science - Methods

Single subject and programme course

6 credits

Kognitionsvetenskaplig metod

729A94

Valid from: 2010 Autumn semester

**Determined by**

The Quality Board at the Faculty of Arts  
and Sciences

**Date determined**

2010-09-24

## Main field of study

Cognitive Science

## Course level

Second cycle

## Advancement level

A1N

## Course offered for

- Master Programme in Cognitive Science

## Entry requirements

- Bachelor's Degree in Cognitive Science equivalent to a Swedish Kandidatexamen  
or  
Bachelor's Degree in Computer Science equivalent to a Swedish Kandidatexamen  
and  
30 ECTS credits in one of the following subject areas
  - Psychology
  - Linguistics
  - Philosophy
  - Neuroscience
  - Anthropologyor  
Bachelor's Degree in Psychology of Neuroscience equivalent to a Swedish Kandidatexamen  
30 ECTS credits passed in Computer Science
- English and Swedish corresponding to the level of English and Swedish in Swedish upper secondary education (Engelska 6 and Svenska 3)

## Intended learning outcomes

On completion of the course, the student should be able to

- account for central methods that are used in the cognitive science field
- account for the strengths and weaknesses of these methods
- account for the relevance that choice of method can have on carrying out a study in cognitive science
- account for how results from different studies where different methods have been used can be integrated
- discuss the problems that may be related to such integration
- argue for the choice of appropriate method when a cognitive science issue should be studied.

## Course content

The contents of the course address

- the basic question what is a method within a scientific discipline?
- Some of the central methods that will be used are, for example, computer modelling, questionnaires, interviews, simulations, formal proofs of mathematical or logical character, studies through observation and "grounded theory", but also other methods, such as eye-movement cameras and different neurological study techniques
- The differences between different methods, for example qualitative and quantitative methods

## Teaching and working methods

The teaching takes the form of seminars in small groups. Different methods are used in a smaller format in these seminars. The student should write an essay and is expected to work with self-study, independently or in groups. The student is expected to work actively by independently searching literature, to in an appropriate way supplement the compulsory reading list.

## Examination

The course is examined through compulsory attendance in seminars and an essay, where one of the methods covered in the course is applied and discussed. Detailed information can be found in the study guide.

If the LiU coordinator for students with disabilities has granted a student the right to an adapted examination for a written examination in an examination hall, the student has the right to it. If the coordinator has instead recommended for the student an adapted examination or alternative form of examination, the examiner may grant this if the examiner assesses that it is possible, based on consideration of the course objectives.

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