



Faculties of Humanities and Theology

## HTXA01, Linguistics and Cognitive Science: ERP and EEG, 7.5 credits

*Språk- och kognitionsvetenskap: ERP och EEG, 7,5 högskolepoäng*  
First Cycle / Grundnivå

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### Details of approval

The syllabus was approved by the programmes director by delegation from the pro-dean for first- and second-cycle studies on 2007-04-24 to be valid from 2007-04-24, autumn semester 2007.

### General Information

Subject: Humanities

The course is offered as a single course. It can normally be included as part of a general degree at both the undergraduate and graduate levels. With the approval of the relevant authenticating body, it can also be included in certain professional degrees.

*Language of instruction:* Swedish

The language of instruction for this course is normally Swedish, but, if agreed through the proper procedure by the lecturers and all the students on the course, it can be taught in English. Such an agreement assumes that both lecturers and all the students are fluent in English

*Main field of studies*

Cognitive Science

*Depth of study relative to the degree requirements*

G1F, First cycle, has less than 60 credits in first-cycle course/s as entry requirements

### Learning outcomes

On completion of the course the student shall

#### Knowledge and understanding

- be able to give an account of the most important methods in ERP and EEG research

### Competence and skills

- be able to carry out basic ERP measurements and be able to analyse and interpret the results
- be able to plan a complete ERP experiment in his/her own area of expertise
- be able to collaborate in small groups during seminars and experiments
- be able to read, understand and evaluate published research reports and be able to apply ERP and EEG measurements to his/her own area of expertise.

### Course content

The course provides basic information on measurements using Event-Related Potential (ERP) and Electroencephalography (EEG). The following areas are included: creating an ERP signal, the signal-noise relationship, filtering. The students' practical abilities in designing an ERP/EEG scientific experiment are emphasised in the recording of ERP data, the quantifying and analysis of ERP data and techniques of "source localisation".

### Course design

Teaching is in the form of obligatory seminars and laboratory experiments

### Assessment

At the half-way stage in the course the students provide a project plan in the form of a poster. At the end of the course students write a 6-8 page application for a project plan. The grade is based on an average of the application, the poster and contributions to seminars.

*Subcourses that are part of this course can be found in an appendix at the end of this document.*

### Grades

Marking scale: Fail, Pass, Pass with distinction.

### Entry requirements

To be eligible for the course requires at least 60 higher education credits within the humanities, or the equivalent.

### Further information

1. The course replaces HTX613
2. The points 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 the current registration information and other relevant documentation.

## Subcourses in HTXA01, Linguistics and Cognitive Science: ERP and EEG

Applies from H07

0701 Linguistics and Cognitive Science: ERP and EEG, 7,5 hp  
Grading scale: Fail, Pass, Pass with distinction