UNIVERSITY OF SKÖVDE

TRANSLATION FROM SWEDISH

COURSE SYLLABUS

Cognitive Neuroscience: Research Practice A1N

7.5 credits

Course code: KU726A
Version number: 7
Valid from: 1 January 2026
Ratified by: Curriculum Committee for Bioscience
Date of ratification: 22 May 2025

1. General information about the course

The course is provided by the University of Skövde and is named Cognitive Neuroscience: Research Practice A1N (Kognitiv neurovetenskap: forskningspraktik A1N). It comprises 7.5 credits and is a second-cycle course. The level of progression is A1N.

The course is a part of the main field of study in Cognitive Neuroscience. The disciplinary domain of the course is Natural Sciences.

2. Entry requirements

The prerequisite for this course is passed course KU538G Bachelor Degree Project in Cognitive Neuroscience G2E (or equivalent).

A further requirement is proof of skills in English, equivalent of studies at upper secondary level in Sweden, known as English 6 or English level 2. This is normally demonstrated by means of an internationally recognized test, e.g., IELTS, TOEFL, or an equivalent.

3. Course content

The course introduces research within cognitive neuroscience in practice, with a focus on the methods that are available in the laboratories at the University of Skövde (e.g. EEG/ERP). The students get to train their ability to collect high quality data, and analyze it with the help of relevant software (e.g. SPSS). In addition, they are introduced to and trained in the use of the most widely spread software environment within the field: MATLAB. As a part of this, the course also reflects over the role of digitalization within cognitive neuroscience research.

4. Objectives

After completed course the student should be able to:

- collect cognitive neuroscience research data of adequate quality,
- analyze the collected data in an appropriate manner using relevant software,
- create simpler, and apply and revise existing, scripts in the software environment MATLAB, and
- describe how research within cognitive neuroscience depends on digitalization for continued progress.

5. Examination

The course is graded A (Excellent), B (Very good), C (Good), D (Satisfactory), E (Sufficient) or F (Fail).

A final grade of the course is only issued when both the examination parts in the course have been passed.

The examinations of the course consist of the following modes of assessment:

- **Written assignments**
  5 credits, grades: A/B/C/D/E/F (determines the final grade)
- **Practical examination**
  2.5 credits, grades: G/U

Students with a permanent disability who have been approved for directed educational support may be offered adapted modes of assessment.

6. Types of instruction and language of instruction

The teaching is comprised of workshops and lectures.

The teaching is conducted in English.

7. Course literature and other educational materials

Luck, S. J. (2014). *An Introduction to the Event-Related Potential Technique* (2nd ed.). Cambridge, MA: MIT Press. ISBN 9780262525855.

Scientific articles and other relevant materials may be added according to the teacher's instructions.

8. Student influence

Student influence in the course is ensured by means of course evaluation. The students are informed about the results of the evaluation and potential measures that have been taken or are planned, based on the course evaluation.

9. Additional information

Further information about the course, as well as national and local governing documents for higher education, is available on the website of the University of Skövde.