COURSE DESCRIPTION
Post graduate studies

Introduction to electro- and magnetoencephalography (EEG and MEG), 3 hp

COURSE OBJECTIVES
After completion of the course the students will be able to:

- Explain the foundations of electroencephalography (EEG) and magnetoencephalography (MEG)
- Discuss different aspects of experimental design of importance for EEG and MEG studies
- Explain and conduct preprocessing of EEG and/or MEG data
- Explain the different type of analysis of EEG and/or MEG data
- Conduct analysis of evoked responses as well as induced responses in EEG/MEG data

EXAMINATION
Examination includes an individual written assignment.

ADMISSION REQUIREMENTS
Registration as doctoral or master student.

GRADING
The grades are Approved and Not approved.

COURSE READINGS
Details of required and recommended reading will be presented at the start of the course.

OTHERS
It is recommended to have participated in “Introduction to brain imaging, 1.5 hp” before starting this course.

Students need to have access to EEGLAB which can be downloaded from https://sccn.ucsd.edu/wiki/How_to_download_EEGLAB. EEGLAB runs under MatLab, which can be downloaded via minit.liu.se. Further information will be given at the start of the course.

The course will be given in English or Swedish depending on the students.

MODES OF TEACHING/WORKING FORMS
Teaching includes workshops with theoretical and practical elements (preprocessing, evoked analysis, induced analysis). The EEG/MEG analyses program EEGLAB (running under MatLab) will be used for practical exercises. The students are expected to have access to EEGLAB during the workshops.

Effective from autumn 2020

Approved by FUN 2020-09-03