FDD3401 Neuroscience 7.5 credits

Neurovetenskap

This is a translation of the Swedish, legally binding, course syllabus.

Establishment

Course syllabus for FDD3401 valid from Spring 2019

Grading scale

P, F

Education cycle

Third cycle

Specific prerequisites

Language of instruction

The language of instruction is specified in the course offering information in the course catalogue.

Intended learning outcomes

On completion of the course, the participant should be able to:

- account for the macroscopical and microscopical structure of the nervous system

- account for the whole chain of structures and the function of these structures, from individual ion canals in cell membrane to sensory, motor and cognitive functions
- summarize the scientific basis for receiving knowledge of the different parts of the nervous system
- evaluate and account for the contents in scientific articles within fields related to neuroscience and neuroinformatics

Course contents

The function of the individual neuron of the molecular and cellular level, the structure of the neuronal networks, the general structure of the nervous system, control of simple and more complex central nervous functions.

The teaching includes lectures and laboratory sessions.

Course literature

Purves, Augustine, Fitzpatrick, Hall, LaMantia, White (Ed) Neuroscience 5th ed. Sinauer Associates Inc Publishers 2011.

Review articles associated with the lecture contents (will be made available at the course webpage).

Examination

- EXA1 - Examination, 7.5 credits, grading scale: P, F

Based on recommendation from KTH's coordinator for disabilities, the examiner will decide how to adapt an examination for students with documented disability.

The examiner may apply another examination format when re-examining individual students.

If the course is discontinued, students may request to be examined during the following two academic years.

Other requirements for final grade

- The student should take a written exam and score at least E grade.
- The student should submit an essay (~3000 words) on an advanced topic. The topic will be decided by the course examiner in consultation with the student.
- The final grade depends on performance in the written exam, essay and participation in the labs/tutorial sessions.

Ethical approach

- All members of a group are responsible for the group's work.
- In any assessment, every student shall honestly disclose any help received and sources used.
- In an oral assessment, every student shall be able to present and answer questions about the entire assignment and solution.