



DEPARTMENT OF NEUROSCIENCE

C4F3220 Basic Human Neuroscience, 10 credits (hec)

Grundläggande human neurovetenskap, 10 högskolepoäng

Third-cycle level / Forskarnivå

Approval

This syllabus is approved by the The Committee for Doctoral Education on 2023-12-01, and is valid from Spring semester 2024.

Responsible department

Department of neuroscience, Faculty of Medicine

Prerequisite courses, or equivalent

No prerequisite courses, or equivalent, demanded for this course.

Purpose & Intended learning outcomes

Purpose

The purpose of this course is to provide students without a previous education in biomedicine/medicine knowledge in basic human neuroscience equivalent to that of the medical programme. It will satisfy the requirement for a course providing a grounding in human biology/physiology and/or pathology.

Intended learning outcomes

After the course, the doctoral student shall have obtained a thorough knowledge about the human nervous system that includes the following: 1) Macro- and microscopic organization and development of the nervous system; 2) Cellular neurobiology including signaling in the nervous system; 3) Structure and function of sensory systems underlying vision, somatosensation and pain, hearing and balance, smell and taste; 4) Structure and function of motor systems underlying the planning, initiation and regulation of movements. 5) Higher central nervous system functions including neuropsychology and regulation of behavior.

Course content

The course will follow the curriculum of the Neuroscience course for medical students. The content consists of lectures, seminars and practicals that provide knowledge and understanding of nervous system organization and development, cellular neurobiology, sensory and motor functions, and higher nervous system functions.

Forms of teaching and learning

Lectures, laboratory practicals, oral exam seminars, and neuroanatomy and neurohistology workshops.

Language of instruction

The course is given in English.

Grading scale

Pass (G) /Fail (U)

Compulsory components & forms of assessment

Compulsory components

The three oral exam seminars, the practical test in neuroanatomy and the final exam.

Forms of assessment

Three formative oral exam seminars, one formative practical test in neuroanatomy, and a final summative written exam.

Course literature

Mandatory literature: Neuroscience by D. Purves et al, 6th edition, Sinauer, Sunderland, USA.