



**Karolinska
Institutet**

Course syllabus for

Nervous system: Structure and Function, 7.5 credits

Nervsystemets struktur och funktion, 7.5 hp

This course has been cancelled, for further information see Transitional provisions in the last version of the syllabus.

Please note that the course syllabus is available in the following versions:

Spring2008 , Autumn2009 , Autumn2010 , Autumn2011 , Autumn2012 , Autumn2013 , Autumn2014 , Autumn2015

Course code	1AU003
Course name	Nervous system: Structure and Function
Credits	7.5 credits
Form of Education	Higher Education, study regulation 2007
Main field of study	Not applicable
Level	GX - First cycle
Grading scale	Pass, Fail
Department	Department of Clinical Science, Intervention and Technology
Decided by	Programnämnden för audionomprogrammet
Decision date	2007-10-04
Revised by	Programnämnd 4
Last revision	2013-05-06
Course syllabus valid from	Autumn 2013

Specific entry requirements

Specific eligibility according to The Programme syllabus of The Study Programme in Audiology 180 credits.

Objectives

The general aims of the course are that the student should acquire basic knowledge about the structure of the nervous system and function. This is necessary to understand the function and pathology that is treated in coming course in medical audiology of the auditory system.

The expected learning outcomes of the course

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

-describe and understand the central and the development of the peripheral nervous system and its cellular structure and function

- identify and define neuro-anatomical structures and describe the functions of the sensory and motor parts of the nervous system
- explain and understand how the central and peripheral nervous system is organised and how the different parts of the nervous system interact in the higher cognitive functions
- explain how neurological disturbances can influence cognitive and executive functions during different phases of the human development
- analyse and reflect around how a neuropsychological investigation is done and which measures it can lead to

Content

The course starts with an introduction in medical terminology and basic anatomic and physiological concepts. The course further treats the systematic and topographic organisation of the nervous system and the structure and function of the neuron. The anatomy and pathology of the brain are also clarified through demonstrations. An overview of the functional organisation of the nervous system with an emphasis on the sensory and motor the system is given. Furthermore, the cellular organisation of the nervous system and the biochemical activity of the brain are clarified. The course also contains an overview of the development of the brain with a focus on fields relevant to the linguistic and visual functions and teaching of neurological disturbances and investigation of these with a focus on language, memory and executive functions.

Teaching methods

Lectures, exercises, seminars and demonstrations.

Exercises, seminars and demonstrations are compulsory. In case of absence from a compulsory part, the student is responsible for contacting the course coordinator for complementary assignment.

The course director assesses how absence from compulsory education elements may be compensated for. Before the student has participated in the compulsory parts or has replaced compulsory education, in accordance to the instructions of the course coordinator, the final study results cannot be reported.

Absence from a compulsory education element may result in that the student can not recover the occasion until next time the course be given.

Examination

Written examination

For a Pass grade in the course, attendance and active participation in compulsory parts are also required. For students who have not passed the regular examination, possibility for examination is offered at a total of six examinations, of which the three last in connection to the next occasion when the course is given. As examination, the times are counted the student participated in the same test. Supplementary addition to a written assignment is counted as an examination.

Transitional provisions

Examination may take place under the previous reading list during a period of one year after the renewal of the reading list. Examination will be provided during a period of two years after a close-down of the course.

Other directives

A study guide is distributed at the beginning of the course, comprising assessment criteria for examination, specific instructions for certain tasks, a timetable specifying compulsory parts, and a list of

responsible teachers. The course evaluation will be carried out according to the guidelines that are established by the Board of education. The course evaluation will be carried out both through a written course evaluation at the end of the course, and through an oral course forum at least once in connection with the course, under which the students can state their opinions.

Literature and other teaching aids

Pinel, John P. J.

Biopsychology

8. ed., international ed. : Boston, Mass. : Pearson, cop. 2011 - 584 s.

ISBN:978-1-4082-8700-2 LIBRIS-ID:12096781

[Library search](#)

Pinel, John P. J.; Edwards, Maggie

A colorful introduction to the anatomy of the human brain : a brain and psychology coloring book

2 ed. : Boston, Mass : Allyn and Bacon, c2008 - xiv, 231 p.

ISBN:978-0-205-54874-3 LIBRIS-ID:11439884

[Library search](#)

Scientific papers and other relevant materials may be added.

Lindskog, Bengt I.; Lindskog, Stefan

Medicinsk mini-ordbok

7. uppl. : Stockholm : Norstedt, 2011 - 508 s.

ISBN:978-91-1-302791-3 LIBRIS-ID:12134782

[Library search](#)

Kahle, Werner; Frotscher, Michael

Color atlas and textbook of human anatomy.n Vol. 3p Nervous system and sensory organs

5. rev. ed. : Stuttgart ;a New York : Thieme, 2003 - 406 s.

ISBN:3-13-533505-4 LIBRIS-ID:9048029

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