



**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

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|----------------------------|---|
| 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 | 2012-05-03 |
| Course syllabus valid from | Autumn 2012 |

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
- account too 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
- account for 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 structure and function of the nervous system, 7.5 hp 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 also are clarified through demonstrations. An overview is given of the functional organisation of the nervous system with an emphasis on the sensory and motor the system. 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.

Examination

Examination takes place through written examination

For a Pass grade in the course, satisfactory attendance at compulsory parts is also required. In case of absence from compulsory part, the student is responsible alone to contact course coordinator for complementary assignment. Possibility is offered for students who not have become passed at the regular examination to total six examinations, of which the three last in connection with the next occasion the course be given.

Transitional provisions

Examination may take place under the previous reading list during a period of one year after the date of 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. Course evaluation will be carried out in accordance with the guidelines established by the Board of Education. 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, where the students may express their opinions.

Literature and other teaching aids

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](#)

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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