



**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	Programme Committee 4
Last revision	2015-04-27
Course syllabus valid from	Autumn 2015

## **Specific entry requirements**

Specific eligibility according to the programme syllabus of the Study Programme in Audiology 180 HE 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 a later 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:

- explain and understand how the central and peripheral nervous system is organised and its cellular structure and function
- identify and define neuro-anatomical structures
- describe and understand development of the central nervous system
- describe the functions of the sensory and motor parts of the nervous system
- describe and understand how the different parts of the nervous system interact in the higher cognitive functions
- explain how neurological disturbances and illnesses can influence sensory, motor, cognitive and executive functions
- know how a neuropsychological investigation is done and which measures it can lead to

## Content

The course begins with an introduction to medical terminology and basic anatomical and physiological concepts. The course further treats the systematic and topographic organisation of the nervous system and the cellular organisation and biochemical activity of the nervous system. An overview of the functional organisation of the nervous system with an emphasis on the sensory and motor the system and the higher cognitive functions is given. The course also contains an overview of the development of the brain and teaching of how neurological disturbances can develop. The anatomy and pathology of the brain are also clarified through a demonstration. At the end of the course there is a seminar where students acquire knowledge about how a neuropsychological investigation is done and which measures it can lead to.

## 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 coordinator decides how absence from compulsory course elements can be made up. Study results cannot be reported until the student has participated in compulsory course elements or compensated for any absence in accordance with instructions from the course coordinator. Absence from a compulsory course element could mean that the student can not retake the element until the next time the course is offered.

## Examination

Written examination

For a Pass grade in the course, attendance and active participation in compulsory parts are also required. Students who do not pass a regular examination are entitled to re-sit the examination on five more occasions. Each time the course is offered, one regular examination and two additional examinations are given. Each occasion the student participates in the same test counts as an examination. Supplementary addition to a written assignment is counted as an examination. Submission of a blank exam paper is regarded as an In case a student is registered for an examination but does not attend, this is not regarded 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

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, during which the students can state their opinions.

## Literature and other teaching aids

### Mandatory literature

*Pinel, John P. J.*

#### **Biopsychology**

Ninth edition. : - xxii, 552 pages

ISBN:9780205915576 (alk. paper) LIBRIS-ID:16015641

[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.

### Recommended literature

#### **Medicinsk miniordbok**

*Lindskog, Bengt I.; Lindskog, Stefan; Nilsson-Ehle, Peter; Wahlberg, Peter*

8. uppl. : Lund : Studentlitteratur, 2014 - 508 s.

ISBN:9789144102306 LIBRIS-ID:15408018

[Library search](#)

*Kahle, Werner; Frotscher, Michael*

#### **Color atlas of human anatomy. : Volume 3 Nervous system and sensory organs**

6th rev. ed. : Stuttgart : Thieme, cop. 2010. - 412 p.

ISBN:9781604061215 (eISBN) LIBRIS-ID:12040454

[Library search](#)

<http://ebooks.thieme.com/pdfreader/nervous-systems-sensory-organs-color-atlas-human-anatomy-vol-iii>

Color Atlas of Human anatomy Vol 3 Nervous system and Sensory Organs

Other relevant e-books are also available for download from the library of Karolinska Institutet