



**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	2011-05-04
Course syllabus valid from	Autumn 2011

Specific entry requirements

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

Objectives

The general aim of the course is that the student should acquire basic knowledge of the structure and function of the nervous system . This is necessary to understand the function and pathology that are treated in a future course of the auditory system in medical audiology. Learning outcomes of the course On completion of the course, the student should be able to: - describe and understand the development of the central and 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 for 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 disorders may affect cognitive and executive functions during different phases of the human development - describe at a general level how a neuropsychological investigation is carried out and what actions it may 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 illustrated through demonstrations. An overview of the functional organisation of the nervous system is given with an emphasis on the sensory and motor systems. Furthermore, the cellular organisation of the nervous system and the biochemical activity of the brain are illustrated. The course also contains an overview of the brain development with a focus on fields relevant to the linguistic and visual functions, and teaching of neurological disorders and investigation of these with a focus on functions, language, memory and executive functions.

Teaching methods

Lectures, workshops and demonstrations.

Examination

Examination takes place through written examination. For a Pass grade in the course, attendance at compulsory parts is also required. In case of absence from a compulsory part, the student gets an individual complementary assignment determined by the course coordinator. Students who have not passed the regular examination are offered one re-examinations in connection with the regular opportunity and one more before the course take part next time. All in all, there is a possibility of six examinations, the last three of which are provided in connection with the next regular course.

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

Lindskog, Bengt I.

Medicinsk miniordbok

Frank, Urban

6., [omarb. och utvidgade] uppl. : Stockholm : Nordiska bokh., 2003 - 492 s., xvi pl.-s. i färg
ISBN:91-516-0090-0 LIBRIS-ID:9362592

[Library search](#)*Pinel, John P. J.; Edwards, Maggie***A colorful introduction to the anatomy of the human brain : a brain and psychology coloring book**

Boston, Mass ; a London : Allyn and Bacon, cop. 1998 - xiv,226 s.

ISBN:0-205-16299-1 LIBRIS-ID:4709220

[Library search](#)*Stirling, John D.***Introducing neuropsychology**

Hove : Psychology Press, 2002 - xviii, 291 s.

ISBN:0-415-22758-5 LIBRIS-ID:4921747

[Library search](#)*Stirling, John***Neuropsykologi : en introduktion***Wallgren, Gunnel A.*

Lund : Studentlitteratur, 2004 - 346 s.

ISBN:91-44-02775-3 LIBRIS-ID:9559590

[Library search](#)**Arbetsbok till Människokroppen : fysiologi och anatomi***Sjaastad, Øystein V.; Toverud, Kari C.; Junker Miranda, Ulrika*

1. uppl. : Stockholm : Liber, 2003 - 189 s.

ISBN:91-47-05184-1 LIBRIS-ID:8909957

[Library search](#)*Bjålie, Jan G.; Junker Miranda, Ulrika; Toverud, Kari C.***Människokroppen : fysiologi och anatomi**

1. uppl. : Stockholm : Liber, 1998 - 486 s.

ISBN:91-47-04919-7 (inb.) LIBRIS-ID:8354339

[Library search](#)*Kahle, Werner; Frotscher, Michael***Color atlas and textbook of human anatomy[Elektronisk resurs]n Vol. 3,p Nervous system and sensory organs**

5. ed. rev. and enl. : Stuttgart ;a New York : Thieme, 2003 - PDF (406 p.

LIBRIS-ID:10350356

URL:

http://link.libris.kb.se/sfxkib?url_ver=Z39.88-2004&ctx_ver=Z39.88-2004&ctx_enc=info:ofi/enc:UTF-8&Tillgänglig_för_användare_inom_Karolinska_institutet_z_Thieme_EbookLibrary:Full_Text*Lindskog, Bengt I.; Zetterberg, Bengt L.***Medicinsk terminologi : lexikon : [A-Ö]**

Stockholm : Nordiska bokh., 1981 - 620, [10] s.

ISBN:91-516-0030-7 (inb.) LIBRIS-ID:8357820

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