Course syllabus for

The Healthy Human 3, 16.5 credits

Den friska människan 3, 16.5 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:
Autumn2008 , Autumn2009 , Spring2010 , Spring2011 , Spring2012 , Autumn2016 , Autumn2017 , Spring2020 , Spring2022 , Autumn2023

Course code	2LK009
Course name	The Healthy Human 3
Credits	16.5 credits
Form of Education	Higher Education, study regulation 2007
Main field of study	Medicine
Level	G1 - First cycle 1
Grading scale	Pass, Fail
Department	Department of Neuroscience
Participating institutions	• Department of Physiology and Pharmacology • Department of Molecular Medicine and Surgery • Department of Clinical Neuroscience
Decided by	Programnämnden för läkarprogrammet
Decision date	2007-03-13
Revised by	Programme committee for study programme in medicine
Last revision	2018-01-11
Course syllabus valid from	Autumn 2017

Specific entry requirements

All credits from semester 1.

Student that has failed on placement (VFU)/equivalent as a consequence of the student showing such serious deficiencies in knowledge, skills or attitudes that the patient security or the patients ' trust for the healthcare have been jeopardized, is qualified to a new placement only when the individual action plan has been completed.

Objectives

Purpose

The purpose of the course is that the student shall gain basic anatomic and neurobiological knowledge

for the medical profession. This requires a coherent image of a healthy person's surface anatomy and topography, and the normal function of the nervous system.

Learning outcomes
The learning outcomes relate to the general learning outcomes for the entire study programme in medicine. Knowledge is divided into levels according to SOLO taxonomy (S1-S4) and skills according to the Miller's pyramid (M1-M4)*.

Knowledge
The student shall

- describe both in writing and orally in English the structure and function of the nervous system, from individual ion channels in the cell membrane to sensory, perceptive, motor, emotional and cognitive functions, including behaviour, and using this knowledge as a basis, describe how disturbances to the function of the nervous system can be detected and explained (S3).
- categorise and analyse anatomic structures in the head, neck and torso from a surface-anatomic and topographic perspective and relate these to pathological changes (S3), and describe the anatomic background and method for general status of abdomen and nerves (S2). Primary care (PV)
- describe the different scientific methods and how knowledge of the nervous system has been obtained, and search for, critically evaluate and benefit from scientific source material (S3).
- describe psychological mechanisms that influence the meeting with patients and their relatives (S3). Professional development (PU)

Skills
The student shall

- be able to use the palpatory method to identify surface anatomic structures, notice how inner organs project in the body surface, carry out general status evaluation of abdomen and nerves, and identify the nervous system's structures on anatomic and histological preparations, on anatomic models and in radiologic images (M3). Primary care (PV)
- start conversation with a patient and clarify the reason for the visit, making use of interview techniques focusing on the patient, including thoughts, concerns and desires (M3). (PV)
- display the ability to work as part of a group (M2), (PU)
- describe the principal procedure for the functional tests conducted at the course laboratories with a view to sight, hearing and vestibulocochlear nerve, in addition to neurological and cognitive functions (M2)

Attitude
The student shall

- treat patients, other students, teachers and staff with respect and take active responsibility for his/her own learning and professional development (PU)
- display an ethical attitude towards dead bodies. (PU) (PD)

Content

The core of the course subject comprises the basic knowledge in areas of anatomy and histology of the head, neck, torso and nervous system, in addition to the development of the nervous system, cellular neurobiology, sensory and motor functions, the higher central nervous functions and neuropsychology.

In addition, there will be clinical elements within the areas of otorhinolaryngology, neuroradiology, neurosurgery, neurology and movement disorders. The course will be taught by basic science and clinically active teachers.

The course is divided into four modules.

The body as an entity – topography and surface anatomy

The contents of this module focus on

- The three-dimensional circumstances related to inner organs, vessels and nerves in the head, neck and torso and how their structures project in the body surface, in order to provide a basis for examination techniques.
- Palpable structures, in order to gain an understanding of examination methods for different symptoms of disease in the locomotor system and in superficial organs.
- Basic anatomic knowledge to allow interpretation of radiological examinations.

The Nervous system - from ion channel to behaviour
All teaching and examination in the module is in English.
This module is divided into five sections:

- The macroscopic and microscopic structure and development of the nervous system.
- Cellular neurobiology. Transmission of signals within the nervous system.
- Sensory functions, integrated structural and functional. Perception.
- Motor functions, integrated structural and functional. Planning, initiation and regulation of movement.
- Higher central nervous functions, neuropsychology. Regulation of behaviour.

Professional Development
This module comprises two days dedicated to medical psychology, focusing on application of medical psychology within somatic medicine, a review of sexuality and learning psychology, memory and compliance.

Primary health care
This module comprises two parts.
Part 1: The student follows the process of welcoming a patient by a physician and carries out status training. The student also trains in carrying out consultations using interview techniques focusing on the patient and in providing and receiving feedback.
Part 2: The student is trained to perform the practical execution of a general status examination of the nervous system.

The body as an enity - topography and surface anatomy, 5.5 hp

Grading scale: GU

The nervous system - from ion channel to behaviour, 10.0 hp

Grading scale: GU

Professional development, 0.5 hp

Grading scale: GU

Primary health care, 0.5 hp

Grading scale: GU

Teaching methods

Lectures. Seminars with formative feedback. Group work involving practical surface anatomy. Dissections. Workshops in neuroanatomy and neurohistology. Neurophysiological laboratory projects. Group work involving patient cases.
Work-based education takes place during the Primary care module (PV).

Some teaching is in English. The module the Nervous system- from ion canal to behaviour is given completely in English.

Examination

Module: The body as unit- surface anatomy and topography
Examination: Structured practical test and written examination.

Module: The Nervous system- from ion channel to behaviour
All examination during the component is carried out in English.
Compulsory: Seminar courses (written tests) comprise formative examinations that support and provide feedback on the student's acquisition of knowledge. They also simultaneously study in detail, by means of discussions, the contents of the section and contribute to learning for all.
Examination: Written examination.

Module: Professional development (PU)
Compulsory: Block days in Medical psychology.
Examination: Included in the written examination for module 2.

Module: Primary care (PV)
Compulsory: Participation in VIL (integrated workplace learning) comprised by the primary care days. The learning outcomes cannot be achieved by other methods.
Examination: Approved performance in work-based education.

The course director will assess whether and, if applicable, how absence from compulsory educational elements can be compensated. The final report of the study results cannot be issued until the student has taken part in the compulsory educational elements or recovered absence in accordance with the instructions provided by the course director.
Absence from a compulsory educational element may imply that the student is not able to retake the element until the next time the course is held.

There are restrictions on the number of test sittings or practical sittings.
The number of examination and practical training sessions follows the local guidelines of Karolinska Institutet, implying that the number of examinations is limited to 6, while placement, as a rule, may be repeated only once.

A student's work-based education or equivalent may be ended immediately by an examiner if the student demonstrates such a serious lack of knowledge, skills or attitude that patient safety or patients' confidence in medical care is jeopardised. When work-based education is ended in such a manner, the student fails the current module and one instance of work-based education has been used.

In such a case, an individual action plan shall be prepared stating which activities and controls of knowledge are required before the student is allowed a new work-based sitting for this course.

Transitional provisions

If a course has been closed down or undergone major changes, at least two additional examinations (excluding regular examinations) on the previous contents are provided during a period of one year from the date of the change.

Other directives

A course evaluation will be conducted according to the guidelines established by the Board of Education.

Literature and other teaching aids

Feneis, Heinz; Dauber, Wolfgang

Anatomisk bildordbok

Spitzer, Gerhard; Brinkman, Ingrid

5., utökade uppl. /b [fackgranskning: Håkan Aldskogius] : Stockholm : Liber, 2006 - [4], 520 s.
ISBN:91-47-05301-1 LIBRIS-ID:10162715
URL: http://www2.liber.se/bilder/omslag/100/4705301o.jpg
Library search

Gilroy, Anne M.

Anatomy : an essential textbook : Latin nomenclature

New York : Thieme, [2016] - 510 s.
ISBN:9781626231177 LIBRIS-ID:18268868
Library search

Sobotta, Johannes

Sobotta atlas of human anatomy.n Vol. 1,p Head, Neck, Upper Limb

Putz, Reinhard; Pabst, Reinhard; Bedoui, S.

14. ed. : München : Elsevier Urban & Fischer, 2006 - 419 s.
ISBN:0-443-10348-8 (inb.) LIBRIS-ID:10138132
Library search

Sobotta, Johannes

Sobotta atlas of human anatomy. Atlas of human anatomy.

Putz, Reinhard; Pabst, Reinhard
Bedoui, S.

14. ed. : München : Elsevier Urban & Fischer, 2006 - 399 s.
ISBN:0-443-10349-6 (inb.) LIBRIS-ID:10138133
Library search

Tank, Patrick W.; Gest, Thomas R.

Lippincott Williams & Wilkins' Atlas of anatomy Atlas of anatomy.

Burkel, William

Latin ed. : Philadelphia, Pa. : Wolters Kluwer Health/Lippincott Williams & Wilkins, cop. 2009 - xv, 432 s.
ISBN:978-0-7817-8866-3 (hft.) LIBRIS-ID:11223180
Library search

Neuroscience

Purves, Dale

5. ed. : Sunderland, Mass. : Sinauer Associates, cop. 2012 - xvi, 759 s.
ISBN:978-0-87893-695-3 (hbk.) LIBRIS-ID:12074995
Library search

Haines, Duane E.

Neuroanatomy : an atlas of structures, sections, and systems

7. ed. : Philadelphia, Pa. : Lippincott Williams & Wilkins, cop. 2008 - x, 341 s.
ISBN:978-0-7817-6328-8 LIBRIS-ID:10510546
Library search

Myers, David G.

Psychology

11th edition. : New York, NY : Worth Publishers, 2015. - pages cm
ISBN:9781464140815 LIBRIS-ID:17946283
URL: Länk
Library search

Professionell utveckling inom läkaryrket
Andersson, Sven-Olof

1. uppl. : Stockholm : Liber, 2012 - 306 s.
ISBN:978-91-47-09967-2 LIBRIS-ID:12542995
Library search