



**Karolinska
Institutet**

Course syllabus for

Clinical medicine - Neuro, senses and psyche, 30 credits

Klinisk medicin - inriktning neuro, sinnen och psyke, 30 hp

This course syllabus is valid from spring 2014.

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

[Autumn2011](#) , [Spring2012](#) , [Spring2014](#) , [Spring2015](#) , [Spring2016](#) , [Autumn2016](#) , [Autumn2017](#) , [Spring2019](#) , [Spring2020](#) , [Autumn2020](#) , [Spring2021](#) , [Spring2022](#) , [Autumn2022](#) , [Autumn2023](#) , [Spring2025](#)

Course code	2LK063
Course name	Clinical medicine - Neuro, senses and psyche
Credits	30 credits
Form of Education	Higher Education, study regulation 2007
Main field of study	Medicine
Level	AV - Second cycle
Grading scale	Pass, Fail
Department	Department of Clinical Neuroscience
Participating institutions	<ul style="list-style-type: none">• Department of Learning, Informatics, Management and Ethics• Department of Medical Epidemiology and Biostatistics• Department of Clinical Sciences, Danderyd Hospital• Department of Neurobiology, Care Sciences and Society• Department of Clinical Science, Intervention and Technology• Department of Clinical Science and Education, Södersjukhuset
Decided by	Programnämnd 2
Decision date	2011-04-13
Revised by	Programme Committee 2
Last revision	2013-10-25
Course syllabus valid from	Spring 2014

Specific entry requirements

Passed all courses semester T1-T6.

A student failing due to shortcoming in knowledge skills or attitudes, thus jeopardizing patient security and/or trust in medical care, could be assigned for a new clinical rotation only after having completed the individual plan.

Objectives

The learning outcomes of the course are limited to common and dangerous conditions within the specialities neurology ophthalmology, otorhinolaryngology, psychiatry and addiction medicine, and to parts of rehabilitation medicine where the aims relate to the general aims of the entire Study Programme in Medicine.

The knowledge is tiered according to the SOLO taxonomy: S1) simple (e.g. know, identify), S2) compound (e.g. account for, describe), S3) related (e.g. analyse, relate), and S4) extended (e.g. theorise, analyse). The practical skills are tiered according to Miller's pyramid: M1) know, M2) know how to carry out, M3) be able to show, and M4) be able to carry out professionally.

Medical knowledge and understanding

The system of man, in balance

The student should

- be able to relate normal anatomic and physiological relations to disrupted structure and function in senses and nervous systems (S3).
- be able to describe how psychological and social factors affect the function of the individual (S2).

The system of man, in imbalance

The student should

- be able to account for abnormal structure and function in the nervous system and in the sensory organs to be able to recognise, distinguish, investigate and treat various types of common, acute, chronic and life-threatening diseases (S2).
- be able to account for how psychological and social problems can lead to and affect disease and choice of treatment (S2).
- be able to analyse causes of diseases, risk factors, natural progress, principles of investigation and principles of pharmacological as well as non-pharmacological treatment of diseases and injuries to the nervous system and the sensory organs (S3).
- be familiar with basic concepts of rehabilitation medicine (S1).

Humans in interplay

The student should

- have knowledge of relevant Swedish laws (S2).
- be able to analyse his/her own responsibility, authority and obligations and understand the importance of reporting malpractice (S3).
- be able to analyse different methods for patient communication and their application to disturbed function in nervous system, sensory organs and mental abilities (S3).
- demonstrate knowledge of, and understand central concepts and basic assumptions and theories of relevance to medical theory of science (S2).

Skills

The system of man, in direct contact

The student should

- be able to take medical history and be able to carry out a basic neurological, ophthalmological, otorhinolaryngological and psychiatric examination (M3).
- At a general level, know how to handle less common diseases and injuries (M2).
- be able to establish a trustful and empathetic contact with the patient (M3).

The system of man, in indirect contact

The student should

- be able to interpret the results of medical history and examination, set diagnosis, consider differential diagnoses, make clinical decisions and initiate treatment in frequent occurring, acute, chronic and life-threatening neurological, ophthalmological, otorhinolaryngological and psychiatric diseases and injuries in adults (M3).
- be able to assess the needs of rehabilitation, and the needs of cooperation with other professional categories (M3).

Humans in interplay

The student should

- be able to decide adequate nursing level that is primary care, out-patient respective in-patient specialist care, intensive care, voluntary and compulsory psychiatric care (M3).
- be able to document clinical information and be able to use scientific information from databases in order to be able to apply evidence-based medicine (M3).
- know how to distribute efforts between different nursing levels and understand the importance of continuity and well-working nursing chains (M2).
- be able to conduct a dialogue in speech and in writing with patients, families, colleagues and other occupational groups (M3).

Attitude

Knowledge and attitude

The student should

- be able to explain how own values and attitudes influence the behaviour in the contact with patients and persons close to the patient, as with staff within the healthcare (S3).
- have an educational attitude (S3).

Behaviour and assessment skills

The student should

- having developed a patient-focused attitude (M3).
- be able to apply a scientific attitude (M3).
- be able to analyse problems regarding clinical ethics, research ethics and gender (S3).

Content

Integration

The course is partly integrated with the specialities below. Integration with basic scientific subjects takes place concerning the normal and pathophysiological structures of the nervous system and the sensory organs and functions, and continuously concerning pharmacology, clinical pharmacology and clinical pathology.

Parts, subjects and clinical specialities

The course is divided in 4 parts:

Neuro (Neurology): 7.0 higher education credits

Senses (Senses): 8.5 higher education credits

Psyche (Mind): 12.5 higher education credits

Examination: 2 higher education credits

The topic-specific core of the course consists of neurology, rehabilitation medicine, ophthalmology, otorhinolaryngology, psychiatry, addiction medicine and professional and scientific development. The contents are further specified in the detailed descriptions of each part.

Teaching is given together with the medical specialities family medicine, radiology, clinical neurophysiology, clinical pharmacology, neurosurgery and child psychiatry.

Clinical core

The clinical core of the course consists of direct and indirect patient care within the clinical rotations of the different parts, and of organised exercise sessions.

The structure of the course

The course starts with a common theme introduction. Focus is on clinical duty with patient-based supervision and individual feedback. clinical clinical education takes place in hospitals, in out-patient care and in primary care.

Integrating knowledge fields

Professional development

The professional development is emphasised during the course. Opportunities for reflection and exercise are provided, in simple as well as in ethically and psychologically complex situations. A Workshop day in professional development deals with the physician's professional attitudes and responsibility in the

meeting with the patient and includes also a self-evaluation of the student which is discussed with the mentor.

The role of the primary care

The primary care is used in order for the student to learn how to, from the noise of symptoms, recognise clinical important conditions with an emphasis on common conditions, and train active expectance as a working method. The primary care is an appropriate education environment for understanding principles for assessing appropriate nursing level, and for different actors' roles, e g in rehabilitation. The primary care is also an appropriate environment to understand and apply an integration of knowledge from different specialities from the individual patient perspective. In seminars and in connection with case discussions, holistic thinking and interaction with municipality, social services and health insurance funds is discussed in connection with treatment and rehabilitation.

Scientific development

During the course, knowledge and understanding are enhanced within biostatistics, epidemiology, and clinical research methodology related to the subject-specific contents of the theme while skills and approaches are developed.

Neurology, 7.0 hp

Grading scale: GU

Senses, 8.5 hp

Grading scale: GU

Mind, 12.5 hp

Grading scale: GU

Examination, 2.0 hp

Grading scale: GU

Teaching methods

The teaching is given mainly in a patient-oriented way, individually or in small groups.

Teaching with an emphasis on skills is given both through participation in the routine work of the care unit, and through a patient-close, systematic and student-centered teaching. Teaching is also given as handling of first visits at "students reception" and guidance on wards and clinics with individual feedback.

Teaching with an emphasis on knowledge and understanding is given in the form of lectures, seminars, assignment-based group tuition, group tuition, feedback, teaching rounds, patient demonstrations, study visits and individual work with computer support and literature studies. Rehabilitation aspects concerning care and treatment are illustrated continuously during the course and then summarised over a day.

Professional and scientific development is mainly taught integrated in the different parts of the course, while placing in the primary care is given as a cohesive part.

Examination

Compulsory participation

All seminars and demonstrations and all proficiency training and clinical rotations have compulsory attendance, this includes the PU-workshop. Other compulsory teaching including practical, oral and

written assignments and tests are stated specifically in the included parts/subparts' different timetables. Course administration and responsible teachers decide how the student should compensate absence and incomplete achievements according to defined clinical competences.

Requirements for passed parts

For passed parts, achieved learning outcomes and accomplished obligations are required as above. Clinical parts can be redone once, as a rule. For tests, at least a conditional pass occasion is given during an on-going course.

Examination

The course is completed with a written final examination that examines the learning outcomes of the course. Knowledge acquired earlier during the programme can also be examined if it is relevant in an integrating context. Examination mainly is based on a primary care perspective, and emphasises integrative aspects. Examination comprises 2.0 higher education credits. At least three examinations are a year given. Maximum number of examinations per student is limited to total six. The grades are passed and failed, respectively.

Transitional provisions

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

Other directives

Course evaluation is carried out according to Karolinska Institutet's general evaluation tools, supplemented with relevant issues.

Examination

The examiner may with immediate effect interrupt a student's clinical rotation (VFU), or the equivalent, if the student demonstrates such serious deficiencies in knowledge, skills or attitudes that patient safety or patient confidence in healthcare is at risk. When clinical rotation is interrupted according to this, it implies that the student fails in the current part, and that one clinical rotation opportunity is used up.

In such cases, an individual action plan should be set up for required activities and examinations, before the student is given a possibility for a new clinical rotation in the course.

Eligibility

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.

Literature and other teaching aids

Borg, Jörgen

Rehabiliteringsmedicin : [teori och praktik]

Lund : Studentlitteratur, 2006 - 344 s.

ISBN:91-44-04507-7 (inb.) LIBRIS-ID:10242099

[Library search](#)

Neurologi

Fagius, Jan; Nyholm, Dag

5. uppl. : Stockholm : Liber, 2012 - 584 s.

ISBN:9789147107902 LIBRIS-ID:13613704

[Library search](#)*Anniko (red.), Matti***Öron- näs- och halssjukdomar, huvud- och halskirurgi, bok med eLabb**

4. uppl. : Liber, 2012 - s.

ISBN:9789147107766 LIBRIS-ID:14225703

[Library search](#)**ÖNH-handboken***Friis-Liby, Janne; Groth, Anita*

1. uppl. : Lund : Studentlitteratur, 2010 - 362 s.

ISBN:978-91-44-04883-3 LIBRIS-ID:11788045

URL: [Interaktivt webbmateriäl](#)[Library search](#)*Lang, Gerhard K.***Ophthalmology : a pocket textbook atlas**

2. ed. : Stuttgart ;a New York : Thieme, cop. 2007 - PDF (XXV, 607 s.

LIBRIS-ID:10343311

URL:

<http://ezproxy.its.uu.se/login?url=http://www.thieme.com/SID2418843300174/ebooklibrary/flexibook/pul>
[Tillgänglig för användare inom Uppsala universitet](#)**Beroendemedicin***Franck, Johan; Nylander, Ingrid*

1. uppl. : Lund : Studentlitteratur AB, 2011 - 347 s.

ISBN:978-91-44-04829-1 LIBRIS-ID:12309132

[Library search](#)*Heilig, Markus***Beroendetillstånd**

[2., rev. uppl.] : Lund : Studentlitteratur, 2004 - 217 s.

ISBN:91-44-03504-7 (inb.) (korr.) LIBRIS-ID:9679882

[Library search](#)**MINI-DSM-IV : Diagnostiska kriterier enligt DSM-IV-TR***Herlofson, Jörgen; Landqvist, Mats*

Danderyd : Pilgrim press, 2002 - 311 s.

ISBN:91-973050-9-X LIBRIS-ID:8816546

[Library search](#)**Psykiatri***Herlofson, Jörgen; Ekselius, Lisa*

1. uppl. : Lund : Studentlitteratur, 2009 - 746 s.

ISBN:978-91-44-04026-4 (inb.) LIBRIS-ID:11369004

[Library search](#)*Ottosson, Jan-Otto***Psykiatri**

7., [uppdaterade] uppl. : Stockholm : Liber, 2009 - 634 s.

ISBN:978-91-47-09332-8 LIBRIS-ID:11367270

[Library search](#)

Lynöe, Niels

Medicinska etikens ABZ

Juth, Niklas

Stockholm : Liber, 2009 - 416 s.

ISBN:91-47-09413-3 LIBRIS-ID:11468670

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