



Faculty of Medicine

## LÄKM91, Clinical Medicine 4, 30 credits

*Klinisk medicin 4, 30 högskolepoäng*

Second Cycle / Avancerad nivå

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### Details of approval

The syllabus is an old version, approved by The Medical Degree Programme Board on 2017-10-11 and was valid from 2017-10-11, spring semester 2018.

### General Information

The course makes up semester 9 of the medical degree programme. It is compulsory for a degree of Master of Science in Medicine from Lund University.

Theoretical and practical teaching components take place in Helsingborg, Lund and Malmö but can also be located at healthcare institutions in the whole healthcare region of Southern Sweden.

The course is taught in Swedish. Literature in Swedish and English is used.

*Main field of studies*

Medicine

*Depth of study relative to the degree requirements*

A1F, Second cycle, has second-cycle course/s as entry requirements

### Learning outcomes

#### Knowledge and understanding

For a Pass on the course and with regard to the key clinical situations, the students shall be able to

- explain normal variation in the ordinary development and ageing of individuals, and discuss pathophysiological mechanisms and how they may appear with regard to social, psychological and global factors
- explain the common underlying pathophysiological mechanisms and the first choice of diagnostic method and treatment based on a critical scientific review of current knowledge, and discuss prognosis and follow-up and explain this to colleagues and other personnel categories
- account for principles of referral to specialised care for cases requiring specialist knowledge or for life-threatening conditions
- analyse pharmacological principles in view of initiating, continuing or discontinuing pharmacological treatment of children, pregnant women and mentally ill patients, also taking polypharmacy into account
- analyse and discuss life style changes and health promotion initiatives in society that may have an effect on individuals and groups from a national and global perspective
- account for legal and ethical aspects in relation to individuals and groups of different ages that can be assessed to be in vulnerable situations with regard to common and life-threatening conditions
- propose management and follow-up of individuals in cases where there is suspicion of male violence against women, domestic violence or substance abuse
- describe principles of patient safety with regard to different age groups and conditions, and how to apply them in collaboration with relatives and other care units
- describe the organisation of in-patient and out-patient care of different age groups and conditions with regard to caring processes and the functions of different professional categories

### **Competence and skills**

On completion of the course and with regard to the key clinical situations, the students shall be able to

- obtain an appropriate medical history and apply a conversation technique adapted to the patient's age, emotional and cognitive preconditions, life situation and need of integrity
- make physical and mental examinations of patients of different age groups and report the results in speech and writing to colleagues and other caregivers
- informed by an assessment of the patient's symptoms and psychosocial situation, and clinical findings, assess examination results taking into account the patient's age and psychosocial situation, and propose a likely diagnosis and differential diagnoses and draw up an investigation and treatment plan based on the patient's needs and the current knowledge situation
- conduct a structured conversation with a patient suffering from acute emotional distress and report it to a colleague
- apply principles of clinical management, including legal and ethical aspects, concerning common and life-threatening conditions of children, women and mentally ill patients
- conduct a structured pharmacological review and suggest changes based on the patient's needs and the current knowledge situation
- apply rules and principles of insurance medicine and the issuing of certificates
- discuss how conditions in society may affect the health of individuals and different groups from a national and global perspective, and provide information to groups

- formulate a specific scientific issue based on current knowledge in the context of supporting supervision
- compose a project plan with an appropriate research design for the specialised project based on the issue and overall aim in the context of supporting supervision

### **Judgement and approach**

On completion of the course and adopting a professional approach, the students shall be able to

- establish trusting relationships and apply them professionally in the approach to patients, relatives, healthcare personnel and society
- apply a professional method in the work with patients in vulnerable situations
- assess and discuss how cultural aspects, equal rights perspectives, ethical issues, and global and economic differences may affect the management and care in the clinical work concerning the clinical situations key to the course
- work independently in a team and professionally establish trusting relationships with patients, relatives and other health care personnel
- identify their own deficiencies in knowledge and skill and other limitations in their work and independently initiate changes

### **Course content**

The course deals with the basic knowledge and skills, including the methods of identifying and managing relevant acute and chronic conditions of the key clinical situations within paediatrics, obstetrics/gynaecology, psychiatry, child and youth psychiatry and dependence mechanisms, that are required in order to start work as a graduate physician. Furthermore, the course includes teaching of basic knowledge of, and the ability to apply, the legislation governing the graduate physician's management of patients that are at risk because of psychiatric problems, dependency and abuse, or lack of care, and male violence against women and domestic violence, and legal aspects of abortion and sterilisation.

The course is based on the theoretical and practical contents of previous courses and, compared to CM1, CM2 and CM3, is to further develop the student's ability to manage clinical issues scientifically and professionally, focusing especially on patients in vulnerable situations and growing individuals. Moreover, the course includes training in applying ethical aspects with an equal rights perspective for these patients, taking national legislation and global human rights into account. In addition, the course provides students with further knowledge of pharmacology in different age groups, physical and mental development of children and adolescents, preventive programmes and insurance medicine.

Components training a developed ability to communicate with especially vulnerable individuals are also included. Fiction is used to provide students with an in-depth perspective of the approach to people in vulnerable situations, including current and historical perspectives on mental illness, women and children. The course also includes teaching on domestic violence, power structures and discrimination.

## Course design

The teaching methods are based on student-active learning based on case methodology, lectures and group exercises including relevant issues combined with practical exercises, and clinically integrated learning including assessment, management, professional development and feedback. The student-active learning is also based on relevant case descriptions from the students' individual clinical duties.

Clinically integrated learning also takes place in the night, and on evenings and weekends.

During the course, the students are to compose a project plan in view of the scientific specialisation project in semester 10.

Clinically integrated learning, case tuition, group exercises concerning professional development, skills training and scenario exercises are all compulsory. If the student is absent from a compulsory component, he or she will have to complete the component on a later occasion. Theoretical components may be replaced by written make-up assignments. The examiner determines if the student has achieved the relevant outcomes for a compulsory component. Compulsory components are to be documented in the course portfolio.

## Assessment

The knowledge content of the course is assessed through a written exam (7.5 credits). The exam is in the form of a multiple choice test, requiring the student to select the best answer. A failed test is to be retaken in full with the same exam design.

Practical skills are assessed continuously through direct observation during the course (7.5 credits). In case of a Fail, the student is offered a new opportunity for assessment. The compiled direct observations are assessed as a whole at the end of the course and lead to a grade of Pass or Fail in accordance with previously established criteria. In case of a Fail, the student is to complete the skills component not yet passed.

The students are continuously to document completed components including approved participation in case studies, group exercises and clinically integrated learning in a course portfolio worth 13.5 credits. The course portfolio is also used to document judgement and scientific and professional approach. The documentation is

to include both oral and written components. The course portfolio is continuously assessed in accordance with established criteria.

Scientific project plan (1.5 credits).

The examiner decides on grading.

### **Number of examination opportunities for clinically integrated learning**

Students who do not achieve a Pass at the first opportunity will be offered a new opportunity for clinically integrated learning including examination. No more than two opportunities of clinically integrated learning will be offered. Students who fail clinically integrated learning twice is not offered a further opportunity.

Students who for no valid reason interrupt their clinically integrated learning prematurely, i.e. when 40% or more of the total number of hours is completed, shall be awarded a grade (Pass/Fail) and will have used up one opportunity for clinically integrated learning.

The examiner may immediately discontinue the clinically integrated learning or equivalent of a student if he or she, due to serious deficiencies in knowledge, skills or approach, jeopardises patient safety or the patients' trust in the healthcare system. Discontinuation of clinically integrated learning means that the student fails the component and has used up one opportunity for clinically integrated learning. In situations like these, an individual study plan shall be drawn up for the student. The student must have remedied the deficiencies in order to be offered another opportunity for clinically integrated learning.

The examiner, in consultation with Disability Support Services, may deviate from the regular form of examination in order to provide a permanently disabled student with a form of examination equivalent to that of a student without a disability.

*Subcourses that are part of this course can be found in an appendix at the end of this document.*

### **Grades**

Marking scale: Fail, Pass.

## Entry requirements

To be admitted to the course, students must have passed courses (all assessed components) up to and including semester 7 of the Master of Science programme in Medicine and completed Clinical Medicine 3.

## Further information

### Appendix- clinical situations

The medical degree programme has defined a number of clinical situations that a recently graduated physician will meet and be expected to be able to manage as a house officer. The selection of clinical situations below (of a total of 102 in the entire medical degree programme) is based on their frequency of occurrence in internal medicine. The clinical situations are defined primarily in order for the students to know which areas will be assessed. The clinical training is to provide students with opportunities of practical experience of the clinical situations below, as a complement to the theoretical teaching. The students are to be able to describe and explain patient management, investigation procedure, important differential diagnoses, and preventive and therapeutic interventions for these clinical situations.

Please note that there is a number of clinical situations included in the programme syllabus other than the ones that are key to this course but associated to them on the course.

On completion of the course, the student must be able to manage the following clinical situations:

- Acute crisis reaction
- Suicide risk
- Worry, anxiety
- Compulsive behaviour
- Affective disorders
- Sleeping difficulties
- Delusions/hallucinations
- Eating disorders
- Aggressiveness
- Irritability
- Personality change
- Dependency and abuse
- Deviations from the normal development of children
- Problems of social interaction and communication
- Attention deficit disorders
- Hyperactivity/impulsiveness
- Respiratory problems

- Shock
- Chest pain
- Cramps
- Disordered consciousness
- Fever
- Headache
- Abdominal pain
- Heart palpitations /abnormal heart rhythm
- Fainting
- Asthenia
- Earache
- Indisposition and vomiting
- Diarrhoea
- Poisoning
- Sore throat
- Blood in faeces/dicoloured faeces
- Coughing
- Blood in the urine/proteinuria
- Deviations from the normal development of children (including growth, puberty, psychomotor development)
- Fatigue
- Thirst/dehydration
- Changed fluid and electrolyte balance
- Foreign body
- Heartburn/acid reflux
- Dizziness/balance disorders
- Loss of appetite
- Weight loss/poor weight gain in children
- Drowning incidents/drowning
- Child abuse
- Easy bleeding
- Sensitivity to infections
- Language and speech disorders
- Overweight/obesity
- Epidemiological changes
- Death
- Cardiac arrest
- Terminal care
- Abnormal blood glucose/glucose in urine
- Changed blood picture
- Abnormal laboratory values with regard to liver function
- Abdominal rigidity
- Abdominal pain
- Reproduction/pregnancy
- Normal labour/breast feeding
- Menstrual problems
- Swollen abdomen
- Discharges
- Vaginal bleeding
- Genital pain/ulcers/itching
- Long-term aches/pain
- Contraceptives
- Sweating/hot flashes
- Loss of sexual libido/dysfunction
- Violence/assault





## Subcourses in LÄKM91, Clinical Medicine 4

Applies from V18

- 1701 Written Test, 7,5 hp  
Grading scale: Fail, Pass
- 1702 Practical Test, 7,5 hp  
Grading scale: Fail, Pass
- 1703 Portfolio, 13,5 hp  
Grading scale: Fail, Pass
- 1704 Project Plan, 1,5 hp  
Grading scale: Fail, Pass