



Faculty of Medicine

## LÄKM81, Clinical Medicine 3, 30 credits

*Klinisk medicin 3, 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 is included in semester 8 of the Master of Science programme in Medicine. 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.

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, the students shall be able to

- with regard to the key clinical situations, explain the first choice of investigation and management procedure based on a critical scientific review of current knowledge and propose supplementary investigation and management, and discuss prognosis and follow-up
- explain preventive measures to prevent disease and assess and professionally process pathological findings and results of screening examinations
- suggest principles of patient safety in situations of invasive measures, and methods to evaluate medical activities in the clinical situations key to the course
- describe principles of identifying individuals in cases where there is suspicion of violence or substance abuse
- explain advantages and disadvantages of invasive procedures (damage, benefit, cost) in relation to pharmacological and life style changes from individual, societal and global perspectives
- describe the organisation of in-patient and out-patient care with regard to the caring processes in cases of invasive measures 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

- appropriately obtain the medical history and carry out a relevant clinical examination of a patient in order to propose a diagnosis and differential diagnoses, and assess the seriousness
- propose and perform initial investigation and treatment, issue referrals to diagnostic and therapeutic units required for appropriate care, and scientifically and professionally interpret the results of completed examination, investigation and treatment
- apply medical, pathophysiological, epidemiological and pharmacological knowledge to the analysis of medical history and clinical findings
- describe and apply basic diagnosis and treatment of pain, and fluid and nutrition therapy, taking into account the whole clinical picture and situation of the patient
- under supervision, plan and lead the work in a ward, including appropriate summary and communication of relevant patient information to the people concerned, and plans for the care, rehabilitation and follow up of the patient
- cooperate and communicate with staff of all categories with respect for the responsibilities and skills of each specific professional field
- analyse and communicate the advantages and disadvantages (risks and benefits) of simple invasive measures with the patient, and communicate the result to the patient's relatives, taking into account the whole clinical picture, symptoms and personal background of the patient
- explain the meaning and importance of and apply a sterile environment in connection with surgery
- discuss ethical issues linked to the treatment of patients with serious or terminal diseases/injuries
- reflect on and critically discuss their own and others' norms and values, including different norms and values of professional ethics that are highlighted in professional work.
- independently formulate a specific clinical issue based on authentic patient cases
- perform a systematic literature review including evidence grading of the scientific literature based on a specific clinical issue

- summarise in writing and discuss evidence-graded scientific documentation in a way patients can understand

### **Judgement and approach**

On completion of the course, the students shall be able to

- assess and discuss how global and economic differences and gender can affect management and care within the clinical situations key to the course
- work independently in a team and in a professional way establish trusting relationships with patients, relatives and other healthcare personnel
- provide a specialised discussion of palliative treatment and other situations where there are reasons to refrain from treatment
- analyse the ethical aspects of exposing a patient to an intervention, taking into account the risks and potential benefits to the patient
- discuss their own and others' existential issues in exposed situations
- identify and demonstrate an understanding of their own deficiencies in knowledge and skill and other limitations in the development of a professional role and suggest how to develop their expertise

### **Course content**

The course consists of specialised tuition in clinical work, scientific analysis of clinical problems, medical decision-making and professional approach. It provides specialisation of the students' basic knowledge and skills and focuses on the identification, prevention and management of relevant clinical states in the fields of surgery, urology and orthopaedics, and the associated fields of oncology, anaesthesia and intensive care, hand and vascular surgery, and the image and function diagnostics of relevance. The course also includes global, socio-economic and equal rights perspectives of these states, and work with screening from a population perspective.

The aim is to increase the students' ability to independently assess clinical findings and diseases, and professionally manage patients. The course includes components that develop generic skills with a focus on perioperative care, trauma, acute and palliative situations, and teamwork.

The course is based on the theoretical and practical contents of previous courses and, compared to CM1 and CM2, focuses more on the student's ability to carry out independent clinical work, scientific analysis of clinical issues and medical decision-making, taking the whole situation of the patient into account. Furthermore, students practise applying relevant national legislation and global human rights. The course also entails a specialisation in existential issues, approach and dialogue in the context of serious and terminal disease, and interprofessional cooperation and leadership.

## Course design

The teaching methods are based on student-active learning including frequent assessments and feedback. Theoretical and practical teaching is integrated. Focus is placed on common or acute clinical situations. The students are to practise adopting a health perspective to act and diagnose the most common and most important diseases, and manage them in collaboration with the patient and others concerned. Furthermore, the students are to practise making a diagnosis and initiating treatment of acute life-threatening conditions.

The theoretical teaching is mainly based on case methodology. The course also includes lectures, group exercises, sit-in consultation practice, patient demonstrations, practical exercises in simulated or authentic environments, learning platform activities, image and function diagnosis tuition, and professional development. The practical component of the training also includes clinically integrated learning. The clinically integrated learning includes ward duties, consultation practice, surgery, emergency duties and interprofessional education. Clinically integrated learning also takes place on evenings and weekends.

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 through OSCE (7.5 credits). The test is assessed holistically as Pass or Fail in accordance with previously established criteria. A failed test is to be retaken in full.

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 15 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.

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 6 of the Master of Science programme in Medicine and completed all courses of semester 7.

### **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:

- Respiratory problems
- Shock
- Abdominal rigidity
- Abdominal pain
- Blood in vomit
- Asthenia
- Indisposition and vomiting
- Painful and/or swollen joint

- Trauma (high energy)
- Trauma (low energy)
- Disordered consciousness
- Fractures
- Urination disorders
- Blood in faeces/dicoloured faeces
- Ulcers/wounds
- Sensory changes
- Blood in urine/proteinuria
- Testicle pain/swollen testicle
- Swollen extremities
- Foreign body
- Changed skin colour
- Burn and cold injuries

- Pain on defecation
- Back/neck/shoulder pain
- Movement disorders
- Loss of appetite
- Long-term aches/pain
- Stings and bites
- Altered defecation habits
- Difficulty in swallowing
- Terminal care

And the following associated situations, linked to the topics covered by the course

- Fever
- Diarrhoea
- Changed fluid and electrolyte balance
- Violence/assault



- Child abuse
- Overweight/obesity
- Discharge (women/men)
- Weight loss
- Imported diseases
- Death
- Loss of sexual libido/sexual dysfunction
- Reproduction/pregnancy
- Swollen abdomen
- Deviations from the normal development of children

#### Laboratory situations

- Abnormal laboratory values with regard to liver function

## Subcourses in LÄKM81, Clinical Medicine 3

Applies from V18

- 1701 Written Test, 7,5 hp  
Grading scale: Fail, Pass
- 1702 OSCE-Test, 7,5 hp  
Grading scale: Fail, Pass
- 1703 Portfolio, 15,0 hp  
Grading scale: Fail, Pass