Faculty of Medicine

LÄKR82, Clinical Medicine 3, 30 credits

Klinisk medicin 3, 30 högskolepoäng

Second Cycle / Avancerad nivå

Details of approval

The syllabus was approved by The Medical Degree Programme Board on 2021-09-15 and was last revised on 2023-02-15. The revised syllabus applies from 2023-02-15, spring semester 2023.

General Information

The course is compulsory in the Master of Science in Medicine programme and is included in semester 8.

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.

Language of instruction: Swedish
Literature and teaching in English may be included.

Main field of studies	*Depth of study relative to the degree requirements*
Medicine	A1F, Second cycle, has second-cycle course/s as entry requirements

Learning outcomes

Knowledge and understanding

Upon successful completion of the course, the students shall be able to:

- with regard to the key clinical situations, explain the first choice of investigation and management based on a critical scientific review of current knowledge and propose complementary investigation and management, and discuss prognosis and follow-up
- explain preventive measures to avoid disease and assess and process, in a professional way, the pathological findings in the key clinical situations
- propose principles for patient safety during invasive measures and methods to

evaluate medical activities in the key clinical situations in the course
- account for principles of identifying individuals in cases where there is suspicion of violence or substance abuse
- explain advantages and disadvantages of invasive procedures in relation to pharmacological treatments and lifestyle changes from an individual, societal and global perspective
- describe the structure of in-patient and out-patient care regarding care processes in the case of invasive procedures and the functions of different professional categories
- describe how quality registers can be used for the evaluation of medical activities

Competence and skills

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

- obtain a patient's medical history, conduct a clinical examination, and interpret the results to propose a diagnosis, differential diagnoses and evaluation of severity
- propose and carry out an initial investigation and treatment, issue referrals to diagnostic and therapeutic units needed for the implementation of healthcare and interpret findings on a completed examination, investigation and treatment in a scientific and professional way
- apply medical, pathophysiological, epidemiological and pharmacological knowledge to the analysis of medical history and clinical findings
- describe and apply basic pain diagnostics and treatment, fluid therapy and nutritional treatment, taking the whole clinical picture and situation of the patient into account
- analyse and communicate the positives and negatives (risks and advantages) of simple invasive procedures with the patient and communicate this to families with consideration given to the whole clinical picture of the patient, symptoms and personal background
- explain the meaning and significance of surgical procedures and ensure sterile environments for these
- discuss ethical issues linked to the treatment of serious disease/physical injury and final stages of life
- reflect on and critically discuss their own norms and values and those of others, including different professional ethics and values that may be relevant to the exercise of the profession
- independently formulate a specific clinical issue based on authentic patient cases
- carry out a systematic literature review including evidence grading of the scientific literature based on a specific clinical issue
- summarise in writing and, in an intelligible way for the patients, discuss evidence graded scientific information
- carry out practical technical skills/procedures according to Appendix 2 of the course syllabus

Judgement and approach

Upon successful 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 key clinical situations in the course
- provide a specialised discussion of palliative treatment and other situations where there are reasons to refrain from treatment
- analyse the ethical aspects of putting a patient through a procedure with consideration to risks and potential advantages for the patient

- discuss their own existential issues and those of others in vulnerable situations
- identify and demonstrate an understanding of their own knowledge and skill deficits and other limitations in the development of the professional role and propose how their competence should be developed

Course content

The course consists of specialised tuition in clinical work, scientific analysis of clinical problems, medical decision-making and professional approach. The course develops the student's basic knowledge and skills, and focuses on identification, prevention and handling of relevant clinical states in the areas of surgery, urology and orthopaedics including the associated areas of oncology, anaesthesia and intensive care, hand surgery and vascular surgery as well as imaging and function diagnostics of relevance to these areas. 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 further develop general skills with a focus on perioperative treatment, trauma and acute and palliative situations.

The course is based on the theoretical and practical content of previous courses and, compared with Clinical Medicine 1 and 2, this course focuses more on the students' abilities in independent clinical work, scientific analysis of clinical issues and medical decision-making with regard to the whole patient's situation. Furthermore, students practise applying relevant national legislation and global human rights. The course also includes a specialisation of existential questions, treatment and conversations with patients suffering from severe disease and patients facing imminent death.

Course design

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

The theoretical teaching is mainly based on case methodology. The course 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 specialist instruction in professional development.

The practical component of the training also includes clinically integrated learning. The clinically integrated learning includes ward duties, consultation practice, surgery and emergency duties. Clinically integrated learning also takes place in the evenings and on 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, they will have to complete the component at a later date. 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.

A significant part of the course learning components is carried out in a clinical setting. A condition for students to be able to participate in these components is that the healthcare providers have no formal obstacles to receiving the student. A healthcare provider can deny a student entry to a healthcare institution if it is deemed that patient safety or trust in the healthcare system is jeopardised or if there are any similar obstacles. A refusal may, for example, be based on the student being sentenced for certain crimes or the demonstration of behaviour that has threatened patient safety or trust in the healthcare system. This refusal results in the student being unable to participate in learning components carried out in the clinical setting.

Assessment

The component "Clinically Integrated Training- Basic Professional Approach" (3 credits) is used to continuously assess the student's basic professional approach. Students will be awarded the grade of Fail if they demonstrate deficiencies in knowledge, skills or approach that are serious enough to jeopardise patient safety or the patients' trust in the healthcare system. A grade of Fail may also be awarded if the student has a high degree of absence from clinically integrated training.

If a student demonstrates deficiencies in knowledge, skills or approach that are serious enough to jeopardise patient safety or trust in the healthcare system, or if the student has a high rate of absence from clinically integrated training, the component ?"Clinically Integrated Training - Basic Professional Approach " is to be assessed by an examiner. The examiner should first issue a warning to the student in speech and in writing. If the deficiencies continue despite the warning, the examiner should discontinue the student's clinically integrated training immediately and grade the component as failed. In particularly serious cases, or if the student has failed the component on a previous occasion, the examiner may immediately and without warning discontinue the student's clinically integrated training and grade the component as failed.

Discontinuation of clinically integrated learning means that the student fails the component "Clinically Integrated Training - Basic Professional Approach" and has used up one opportunity for clinically integrated learning. An individual study plan is to be drawn up by the examiner and approved by the programme's student welfare committee. The individual study plan is to include an action plan that states what the student needs to do and demonstrate in order for the deficiencies to be considered rectified. The individual study plan should also state where, when and in which course the student is then able to resume their studies in the programme. The examiner assesses whether the requirements of the action plan have been met and must approve it before the student can be readmitted to studies. If the student fails the component "Clinically Integrated Training - Basic Professional Approach", they will not be permitted to participate in the clinically integrated learning or the course assessments, including the compulsory components, until they have met the requirements of the action plan and the individual study plan.

The assessment of knowledge of the course content is based on a theory exam (10 credits). The exam is a multiple choice test, requiring the student to select the best answer. A failed exam is to be retaken in full with the same exam format.

Practical skills are assessed based on an OSCE examination (5 credits). The test is awarded the grade of Pass or Fail in accordance with previously established criteria. A failed test is to be retaken in full.

The students are to document completed components including approved participation in case studies, group exercises and clinically integrated learning in a course portfolio (12 credits). The course portfolio also documents 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 course portfolio is awarded the grade of Pass or Fail at the end of the course. In addition, a general assessment of the course portfolio is carried out at set intervals. One clinically integrated training opportunity is considered to have been used when the course portfolio is graded at the end of the course.

If the course portfolio is awarded a Fail and the examiner assesses that the student must redo the clinically integrated training in order to pass and the student fails to do so at this second opportunity, another opportunity for clinically integrated training will be considered to have been used.

Decisions regarding the grade of Pass or Fail are made by the examiner.

The first opportunity for a student to participate in an examination is at the first regular opportunity after registering for the course.

All assessed components, with the exception of the theory exam, require the student to participate in course components that are offered in healthcare settings. As mentioned above, if the healthcare provider refuses a student (under "Course design") the student cannot be assessed for these components and will not be awarded a grade on these.

Number of examination opportunities for clinically integrated learning

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

Number of examinations for OSCE

The number of examinations for OSCE is limited to five.

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 examinations/components) up to and including semester 6 of the medical degree programme.

A Pass on the component "Clinically Integrated Training - Basic Professional Approach" in the course Clinical Medicine 2 (T7).

Further information

Appendix 1 - Clinical Situations

The medical degree programme has defined a number of clinical situations that a

physician will face and is expected to be able to manage in their role. The selection of clinical situations below (of a total of 100 in the broader medical degree programme) is based on their frequency of occurrence in internal medicine. The clinical situations are primarily defined in order for the students to know which areas will be assessed. The clinical training is to provide students with opportunities for practical experience of the clinical situations below, to complement the theoretical teaching. The students shall 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, in addition to the clinical situations of relevance to the course, there are a number of additional clinical situations included in the programme syllabus as associated clinical situations for this course.

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

3. Respiratory problems

4. Loss of appetite

5. Deviant diagnostics and accidental findings

6. Deviations from the normal development of children

7. Child abuse

9. Dependency and abuse

10. Blood in faeces

11. Blood in urine/proteinuria

12. Blood in vomit

16. Burn and cold injuries

17. Abdominal pain

18. Shock

19. Diarrhoea

21. Death

23. Fever

24. Discharges (women/men)

25. Fractures

26. Foreign body

30. Changed skin colour

31. Changed fluid and electrolyte balance

32. Altered defecation habits

33. Changes in disease panorama

45. Indisposition and vomiting

47. Asthenia

52. Long-term aches/pain

53. Disordered consciousness

61. Back/neck/shoulder pain

65. Abdominal rigidity

70. Reproduction/pregnancy

71. Movement disorders

73. Screening

74. Loss of sexual libido/sexual dysfunction

76. Pain on defecation

77. Painful and/or swollen joint/s

79. Stings and bites

84. Swollen abdomen

85. Swollen extremities

86. Deglutition disorders

88. Ulcers/wounds

90. Testicle pain/swollen testicle

91. Trauma (high energy)

92. Trauma (low energy)

98. Urination disorders

99. Weight loss

100. Domestic violence

101. Violence/assault

102. Terminal care

105. Overweight/obesity

Appendix 2 - Practical technical skills/procedures

The medical degree programme has defined a number of practical technical skills that a physician will use and is expected to be able to manage in their role. Below are the practical/technical skills that students are specifically trained in during each course. All skills should be possible to demonstrate in OSCE or DOPS. Course directors must ensure that students are offered sufficient training opportunities to master these skills. All of the skills are accumulative through the programme from Clinical Medicine 1. This means that the skills listed in previous courses may also be included in the practical assessment for a given course. Skills related to the physical examination of different organ systems, communication methods, more complex skills and documentation are not included in the lists, with the exception of the examination of infants and gynaecological examinations in Clinical Medicine 4. These skills may also be included in the OSCE or DOPS assessments.

Clinical Medicine 1

Write prescriptions

Carry out an arterial puncture in the radial artery Carry out venous sampling

Give intravenous infusion Give subcutaneous injections Connect an ECG

Measure PEF

Clinical Medicine 2

Carry out a neurological assessment according to the NIHSS Remove a superficial foreign body from eye (model) Examine the optic papilla with an ophthalmoscope Examine the larynx

Carry out an examination of the external auditory canal and eardrum with a microscope

Use established hygiene procedures when in contact with an infected patient Carry out a skin biopsy

Clinical Medicine 3

Treat bodily wounds (including local anaesthesia) Excise cutaneous or subcutaneous lesions

Carry out a rectoscopy on a dummy Insert a nasogastric tube on a dummy

Free the airway on a dummy

Ventilate with a bag valve mask on a dummy Insert a laryngeal mask on a dummy

Insert an oropharyngeal tube and nasogastric tube on a dummy

Insert and fix a peripheral catheter on a dummy

Prepare and administer drugs in prescribed dosages intravenously on a dummy Carry out plastering of distal radius fractures and lower leg fracture

Carry out punctures of the knee joint on a dummy

Treat extremity wounds (including local anaesthesia) Insert an indwelling urinary catheter on a dummy

Carry out a lumbar puncture on a dummy

Practically manage indwelling urinary catheters/bladder disorders

Clinical Medicine 4

Carry out a full examination of a newborn infant including the assessment of tone, neonatal reflexes, skin, throat, fontanelles, external genitalia, including testicular palpation in boys, and the heart, lungs and hips.

Examine a child's eyes with an opthalmoscope

Carry out a gynaecological study including an external and internal examination of female genitalia

Subcourses in LÄKR82, Clinical Medicine 3

Applies from V22

2201 Theory Exam, 10,0 hp
Grading scale: Fail, Pass
2202 Practical examination, 5,0 hp
Grading scale: Fail, Pass
2203 Clinically Integrated Training – Basic Professional Approach, 3,0 hp
Grading scale: Fail, Pass
2204 Portfolio, 12,0 hp
Grading scale: Fail, Pass