



LUND
UNIVERSITY

Faculty of Medicine

LÄKD51, Clinical Preparatory Course, 15 credits *Klinisk förberedelse, 15 högskolepoäng* First Cycle / Grundnivå

Details of approval

The syllabus was approved by The Medical Degree Programme Board on 2019-09-18 and was last revised on 2023-02-15. The revised syllabus applies from 2023-02-15, autumn semester 2023.

General Information

The course makes up the later part of semester 5 of the Medical Programme.

Language of instruction: Swedish

Literature and teaching in English may be included.

Main field of studies

Medicine

Depth of study relative to the degree requirements

G2F, First cycle, has at least 60 credits in first-cycle course/s as entry requirements

Learning outcomes

Knowledge and understanding

For a Pass on the course, the student shall be able to:

- describe basic principles and tools for good patient safety,
- describe Swedish health care organisation, priorities and economics,
- account for structured instruments that can be used to describe an individual's personality,
- account for how the personality can influence how an individual reacts to disease and external psychosocial strain,
- account for basic bacteriology, virology, parasitology and mycology including taxonomic division from a medical perspective,
- describe the importance for health and disease of normal flora,
- account for a clinical picture and explain the underlying pathophysiological mechanisms of infectious disease,

- explain how specific bacteria, viruses, parasites and fungi give rise to disease, how they can evade the immune system and how they develop resistance to antimicrobial agents,
- explain the principles of microbiological diagnostics such as microscopy, cultivation, molecular biological and immunological technologies,
- explain how immunity arises and how the immune defence counteracts infections
- explain the principles of different types of vaccinations,
- explain modes of action for antimicrobial drugs and the principles of their pharmacokinetics and pharmacodynamics,
- describe the origin and consequences of resistance to antimicrobial drugs from a local, national and global perspective,
- explain pharmacokinetic principles including absorption, distribution, metabolism and excretion for a drug,
- explain how relations in society influence the health of individuals and different groups from a local, national and global perspective,
- account for the challenges to good health from a global perspective and its connection to the global sustainable development goals in Agenda 2030,
- account for common types of image and functional examinations and the application of these in clinical diagnostics,
- account for basic principles with respect to radiation physics and radiation safety in connection with diagnostics,
- account for basic pathogenesis, diagnostics and principles of treatment of pain.

Competence and skills

For a Pass on the course, the student shall be able to:

- carry out and document a patient-physician conversation the including patient, the physician and the joint parts and during the conversation establish and maintain constructive contact,
- adapt the patient interaction in relation to the patient's individual situation including personality and mental or somatic disorders,
- evaluate medical history and clinical findings and suggest diagnosis, relevant investigation and treatment of patients with infections,
- carry out and document a physical examination in good contact with the patient and with respect for the patient's integrity, and during the investigation be able to identify significant pathological findings with respect to airways, circulation and abdomen,
- undertake record keeping while taking current regulations into account,
- write referrals for image and functional examinations with relevant questions and information for the type of examination,
- search for information about drugs,
- carry out and document a basic mental status,
- acquire and document a basic pain history,
- apply the current regulatory framework for health care and methods for good patient safety the including SBAR concept,
- explain how basic hygiene procedures and dress codes can prevent infection transfer,
- interpret microbiological results and statements, state and justify choice of antimicrobial treatment at the fundamental level, suggest preventive measures and understand the application of the Swedish Communicable Diseases Act,
- identify possible causes of disease based on laboratory results and clinical findings,
- suggest how different microbial diseases can be investigated with clinical and laboratory investigations,

- communicate the results of studies and conclusions using the correct terminology to colleagues and patients with a language adapted to the target audience,
- handle simple microbiological patient examinations in the laboratory and assess the results,
- under supervision, formulate a specific scientific question based on current knowledge,
- under supervision, compose a project plan with an appropriate research design for a specialised project based on the question and overall aim.

Judgement and approach

For a Pass on the course, the student shall be able to:

- analyse ethical problems relevant to infectious diseases,
- identify and analyse factors of importance for the treatment and outcome of infectious diseases in health care from a local, national and global perspective,
- behave respectfully towards patients, other students, lecturers and staff, and take active responsibility for, and reflect on, their learning and professional development and make a plan for their continued learning development
- evaluate justifications for image and functional examinations including ionising radiation.

Course content

The course takes as its starting point the earlier courses in the Medical Programme regarding knowledge, abilities and evaluation skills as well as scientific and professional approach. The course constitutes an introduction to the clinical semesters. Throughout the course, focus is on communication methodology, physical examination and documentation. Use of the concept SBAR (situation, background, assessment and recommendation) is introduced. The course includes a focus on professional attitude and empathetic treatment of colleagues both in the laboratory and in other situations.

The course contains basic microbiology as is connected to pathogenesis and immunity and its application in clinical microbiology. The course is based on current research with a focus on microbiological diagnostics as part of the assessment and treatment of infectious diseases. The course integrates the role of clinical microbiology both from the perspective of daily clinical patient care and in a larger global health perspective. In both these perspectives, emphasis is placed on understanding the global epidemic of resistance to antimicrobial drugs. Throughout the course, the importance of a scientific approach with respect to clinical microbiology is emphasised. The processes around developing and evaluating new methods that may be included in microbiological routine diagnostics is also included. Time frames and ethical issues in laboratory diagnostics will be highlighted. A scientific approach and critical review of literature are integrated into the course.

The course also gives an overview of current concepts in global health with special emphasis on global inequalities regarding health and the determinants of the health, the role of the health systems, health policy, human rights and health-related aspects of globalisation. The course will also introduce the framework for sustainable development (Agenda 2030).

Basic pain history with a focus on pathogenesis and principles of the treatment of pain and basic psychological state will be introduced. Standard image and functional examinations are demonstrated and the students will practice how to write adequate referrals for such examinations. The course includes concepts, principles and the application of tools for patient safety. Based on earlier semesters, teaching of pharmacological aspects of importance for clinical drug processing is given in and

between different populations.

The skills with respect to reading, understanding, summarising, presenting and discussing scientific articles and searching for scientific literature will be developed.

Course design

The fundamental principle of the course is student-centred learning, in which the students take responsibility for their own knowledge development. To support the student's learning, the central knowledge content of the course is presented through defined preparations, exercises in groups and case-based practical exercises. These components contribute to the student's development of a scientific and professional approach. The central components are supplemented by other learning components such as lectures, group exercises, seminars, activities via learning platforms and laboratory sessions/practical exercises. There will also be elements of clinically-integrated learning in the health care departments of the Southern healthcare region.

During the course, the students are to compose a project plan for their special research project in second half of semester 5.

The group work, clinically integrated training and other group activities specified in the course portfolio are compulsory. Subject to a special decision by the examiner, a compulsory component may be replaced by a written make-up assignment. The examiner determines whether a student has achieved the relevant learning outcomes for the compulsory component, which is documented in the course portfolio.

Some of the course learning components are carried out in a clinical setting. A condition for students to be able to participate in clinically integrated training is that the healthcare providers see 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

Continuous and active participation in the compulsory components is a key element in the assessment of the course.

The assessment of knowledge of the course content is based on a theory exam (5 credits). The exam is in the form of a multiple choice test, requiring the student to select the best answer. If the test is failed, it is to be retaken in full with the same exam design.

Practical skills are assessed based on an OSCE examination (3.5 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 course portfolio (5 credits) documents completed compulsory components, written assignments and passed practical components including a pass on participation in clinically-integrated learning. 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 graded in its entirety with a 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.

A grade of Pass for the course portfolio assumes that the student has participated in course components that are given by healthcare providers. As mentioned above, if the healthcare provider refuses a student (under "Course design") the student cannot obtain a Pass on this component.

The project plan in view of the specialised research project in the second half of semester 5 is awarded 1.5 credits.

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.

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 examinations/components) up to and including semester 3 of the Medical Programme.

Passed grade on PBL - Basic Professional Approach in the course Pathogenesis (T4).

Subcourses in LÄKD51, Clinical Preparatory Course

Applies from H23

- 2301 Theoretical Examination, 5,0 hp
Grading scale: Fail, Pass
- 2302 Practical Examination, 3,5 hp
Grading scale: Fail, Pass
- 2303 Portfolio, 5,0 hp
Grading scale: Fail, Pass
- 2304 Project Plan, 1,5 hp
Grading scale: Fail, Pass

Applies from H20

- 2001 Theory Examination, 5,0 hp
Grading scale: Fail, Pass
- 2002 Practical Assessment, 3,5 hp
Grading scale: Fail, Pass
- 2003 Portfolio, 5,0 hp
Grading scale: Fail, Pass
- 2004 Project Plan, 1,5 hp
Grading scale: Fail, Pass