



**Karolinska
Institutet**

Course syllabus for

Microbial pathogenesis, 6 credits

Mikrobiell patogenes, 6 hp

This course has been cancelled, for further information see Transitional provisions in the last version of the syllabus.

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

Autumn2007 , Spring2015 , Autumn2018

Course code	2TL008
Course name	Microbial pathogenesis
Credits	6 credits
Form of Education	Higher Education, study regulation 2007
Main field of study	Not applicable
Level	GX - First cycle
Grading scale	Pass, Fail
Department	Department of Laboratory Medicine
Decided by	Styrelsen för utbildning/Programnämnden för tandläkarprogrammet
Decision date	2007-04-26
Course syllabus valid from	Autumn 2007

Specific entry requirements

According to the established programme syllabus Passed examination in the course Structure and function of the organ systems.

Objectives

On completion of the course the student should be able to give a general description of the structure of bacteria and viruses, be able to account for the most important components of the immune system and their function, be able to account for the different ways that bacteria and viruses can spread, be familiar with the most important human pathogenic bacteria and viruses as well as the most important immunological diseases, be able to explain the function of various antibiotics and antiviral agents and how resistance against these arises, be able to account for what bacteria causes infection in the teeth and surrounding tissues and describe important virulence factors for these, be able to account for viruses that concern the oral cavity in particular with regard to their pathology and transmission routes, be able to account for the immunology of the oral cavity, be able to explain how the immune system interacts with different infectious substances, be familiar with the most common laboratory analyses in clinical bacteriology, immunology and virology

Content

In the course, basic and clinical bacteriology, immunology and virology have been integrated to support the student's understanding of the interaction between the body and infectious substances. The course comprises a broad overview of microorganisms and the immune response against these, with special orientation towards the oral microflora, the immunobiology of the mucous membranes and organisms that spread via contact and blood contamination. Within the bacteriology section, the emphasis is on bacteria of significance for mouth infections, normal flora, factors that affect bacteria ability to induce disease as well as antibacterial agents. Within the immunology parts, the emphasis is on the structure and function of the immune defence, mucous membrane immunology and diseases of the immune defence. Within the virology section, the emphasis is on the viruses of the herpes group, human papilloma virus, blood-borne viruses such as hepatitis B and C types 1 as well as modern antiviral treatment. The aim of the course is also to give basic knowledge about infections in other parts than the oral cavity.

Teaching methods

The course comprises lectures, seminars, group assignments, problem-based IT exercises and laboratory sessions. Compulsory parts are attendance in laboratory sessions, seminars and presentation of group assignment. Students who fail to attend any of these parts have opportunity to supplement next time the course is given, or as agreed with the course provider.

Examination

Examination is carried out through written examination. If the student's examination has not passed, the student gets 2 more examination opportunities. After that, the student is recommended to retake the course and is given 3 more examination opportunities. If the student has not passed after 6 trials, he/she has no more admission to the course. (HF chapter 6, section 11 a).

Transitional provisions

If the course is closed-down or undergoes major changes, examination under a previous reading list and learning outcomes are offered, no more than one academic year (no more than 2 examinations in addition to regular examinations) after the implementation of the revision/close-down.

Other directives

Course evaluation is carried out according to the guidelines established by the Board of education. The course replaces TLOA10

Literature and other teaching aids

Oral microbiology and immunology

Lamont, Richard J; Burne, R.A.; Lantz, M.S.; LeBlanc, D.J.

ISBN:1555812627

[Library search](#)