

SYLLABUS

Medical Science: Microbiology, infection control and infection disease 7.5 credits M0029H

**Medicinsk vetenskap: Mikrobiologi, vårdhygien och
infektionssjukdomar**

Course syllabus admitted: Spring 2019 Sp 3 - Autumn 2020 Sp 2

**DECISION DATE
2018-10-31**

Medical Science: Microbiology, infection control and infection disease 7.5 credits M0029H

Medicinsk vetenskap: Mikrobiologi, vårdhygien och infektionssjukdomar

First cycle, M0029H

Education level	Grade scale	Subject	Subject group (SCB)
First cycle	U G VG	Medicinsk vetenskap	Medicine

Entry requirements

In order to meet the general entry requirements for first cycle studies you must have successfully completed upper secondary education and documented skills in English language

Selection

The selection is based on final school grades or Swedish Scholastic Aptitude Test.

Examiner

Veronica Jönsson

Course Aim

On completion of the course, the student should, with a holistic view and ethical attitude, be able to:

- describe basic knowledge in microbiology and immunology
- apply hygienic working methods to counteract the transmission of healthcare-related infections and consider patient safety and security in connection with examinations
- be familiar with aseptic procedures and infection control
- describe healthcare related infections and community spread of infectious diseases in the Nordic countries
- apply laws and regulations with a focus on basic hygiene in health care
- identify personal needs of additional knowledge to be continuously able to develop his/her skills
- express scientifically according to established writing rules and reference management

This knowledge constitutes a basis for coming nursing and clinical courses and is a precondition for giving safe and secure nursing

Contents

- Bacteriology, Virology, Mycology
- Immunology
- Bacterial cultures with microscopy
- Hygienic working methods in healthcare, including hygiene procedures, microbiological purity and waste management
- Infection, disease transmission and methods to prevent healthcare-related infections
- Infectious diseases in adults
- Study assignment in infection control

Realization

Each course occasion's language and form is stated and appear on the course page on Luleå University of Technology's website.

The course offers students introductory and inspirational lectures in selected course sections in order to reach the course's objectives via the distance-bridging technology Adobe Connect and laboratory sessions that take place on campus. Genuine examples are obtained via the study task, during the parallel course's clinical rotation training (internship), where infection control policies and procedures are studied and practiced. The course examinations include a written individual examination in microbiology, immunology and infectious diseases. Infection control and a study assignment are presented and demonstrated together in an individual oral practical examination. The content of course elements and its teaching methods specifically geared towards radiology nursing profession.

Examination

If there is a decision on special educational support, in accordance with the Guideline Student's rights and obligations at Luleå University of Technology, an adapted or alternative form of examination can be provided. Individual written examination in microbiology, immunology and infectious diseases. A study assignment in infection control where the student describes hygienic principles and working methods, current rules, regulations and recommendations, and reflects on possibilities/difficulties in working according to these. An individual oral practical examination is carried out where the student, based on different problems, applies his/her practical skills in infection control. In addition, a laboratory experiment in bacterial incubation including microscopy is carried out. These sections are compulsory. Alternative examination formats may be used.

Remarks

This is a first-cycle course. Study guidance is to be found in the course room in Canvas. "This course must be passed before you can be admitted to the course M0057H. All examination parts must be finished at the latest in connection with the re-examination period in study period 4, i.e. the nearest previous study period. "

Literature. Valid from Autumn 2017 Sp 1

Ericson, E. & Ericson, T. (2009). Klinisk mikrobiologi: infektioner, immunologi, vårdhygien. (4., [omarb. och uppdaterade] uppl.) Stockholm: Liber.

Raadu, G. (Red.). (senaste upplagan). Författningshandbok. För personal inom hälso- och sjukvård. Stockholm: Liber. www.socialstyrelsen.se/SOSFS.

Sverige. Socialstyrelsen (2006). Att förebygga vårdrelaterade infektioner [Elektronisk resurs]: ett kunskapsunderlag. Stockholm: Socialstyrelsen http://www.socialstyrelsen.se/Lists/Artikelkatalog/Attachments/9629/2006-123-12_200612312.pdf

Vårdhandboken - Basala hygienrutiner och personalhygien

<http://www.varldhandboken.se/Texter/Basala-hygienrutiner-och-personalhygien/Oversikt/>

Reference literature may be added and is stated in the study guide.

Course offered by

Department of Health Sciences

Modules

Code	Description	Grade scale	Cr	Status	From period	Title
0008	Written individual exam microbiology and immunology	U G VG *	2.5	Mandatory	A12	
0010	Individual oral practice exam in infection control	U G#	2.5	Mandatory	A12	
0011	Laboration in microbiology	U G#	0.5	Mandatory	A12	
0013	Study task	U G#	0.5	Mandatory	A14	
0014	Digital exam in infectious diseases	U G VG *	1.5	Mandatory	A16	

Last revised

by 2018-10-31

Syllabus established

by Prefekt vid Institutionen för hälsovetenskap 2007-05-15