

Microbiology

Programme course

6 credits

Mikrobiologi

NBIA23

Valid from: 2017 Spring semester

Determined by

Board of Studies for Chemistry, Biology
and Biotechnology

Date determined

2017-01-25

Main field of study

Biology, Chemical Biology

Course level

First cycle

Advancement level

G1X

Course offered for

- Chemical Biology, M Sc in Engineering
- Engineering Biology, M Sc in Engineering
- Biology, Bachelor's Programme

Entry requirements

Note: Admission requirements for non-programme students usually also include admission requirements for the programme and threshold requirements for progression within the programme, or corresponding.

Prerequisites

General Chemistry

Intended learning outcomes

The course aims to give basic knowledge about micro organisms morphology, physiology and metabolism as well as ecology and evolution, including understanding for micro-organisms importance, both in nature as in medicine. The course should, furthermore, give the student practice in microbiological laboratory work.

Course content

Microorganisms basic structure and function and their roles in nature, amongst others taxonomy and classification of prokaryotes, microbe morphology, bacterial physiology, virus, antimicrobials, medical microbiology.

Teaching and working methods

The course includes lectures which give a theoretical summary of the subject and in certain degrees completes and/or explains the course literature. Laboratory work makes up a great part of the course. They exemplify the theory and the results are presented and discussed at seminars.

Examination

LAB1	Laboratory work	1.5 credits	U, G
TEN1	Written examination	4.5 credits	U, 3, 4, 5

To pass the LAB1 active participation in all seminars and practicals is required and all associated reports, quiz and oral presentations must be approved.

Grades

Four-grade scale, LiU, U, 3, 4, 5

Department

Institutionen för fysik, kemi och biologi

Director of Studies or equivalent

Agneta Johansson

Examiner

Agneta Johansson

Course website and other links

<http://www.ifm.liu.se/courses/>

Education components

Preliminary scheduled hours: 62 h

Recommended self-study hours: 98 h

Course literature

Madigan, Martinko: Brock Biology of Microorganisms, (14th ed ,2015). Prentice Hall International, Inc.

Common rules

Regulations (apply to LiU in its entirety)

The university is a government agency whose operations are regulated by legislation and ordinances, which include the Higher Education Act and the Higher Education Ordinance. In addition to legislation and ordinances, operations are subject to several policy documents. The Linköping University rule book collects currently valid decisions of a regulatory nature taken by the university board, the vice-chancellor and faculty/department boards.

LiU's rule book for education at first-cycle and second-cycle levels is available at http://stydokument.liu.se/Regelsamling/Innehall/Utbildning_pa_grund-_och_avancerad_niva.