

Department of Biology Education

Syllabus

for course at advanced level

Microbiology Mikrobiologi

15.0 Higher Education Credits 15.0 ECTS credits

 Course code:
 BL7045

 Valid from:
 Autumn 2015

 Date of approval:
 2015-08-21

Department Department of Biology Education

Main field: Biology

Specialisation: A1N - Second cycle, has only first-cycle course/s as entry requirements

Decision

This syllabus has been approved by the Board of the Faculty of Science at Stockholm University.

Prerequisites and special admittance requirements

Admittance to the course requires knowledge equivalent to 30 credits in Chemistry, including 7,5 credits in Biochemistry, Cell and Molecular Biology 30 credits and additionally 15 credits in Molecular Biology/Molecular Life Sciences. (Three credits corresponds to approximately two weeks full-time studies). Swedish upper secondary school course English B/English 6 or equivalent.

Course structure

Examination codeNameHigher Education CreditsHELAMicrobiology15

Course content

The course covers the cell structure, physiology, and systematics of bacteria, archaea, virus and parasites, medical microbiology with an emphasis on bacterial infections and host defence mechanisms, microbial ecology, and applied microbiology.

Learning outcomes

It is expected that the student after taking the course will be able to:

- •describe the diversity of bacterial, archaeal, virus and parasite according to cell structure, physiology and interactions with other organisms
- •describe the importance of microorganisms in society and in terrestrial and aquatic environments
- work correctly and safely with bacteria, including pathogens
- •search, evaluate, compile, and present scientific information for a specific target audience

Education

The education consists of lectures, laboratory exercises, group discussions, study visits, project work and seminars

Participation in laboratory exercises, group discussions, project work, seminars and group education associated with this is compulsory. An examiner may rule that a student is not obliged to participate in certain compulsory education if there are special grounds for this after consultation with the relevant teacher.

Forms of examination

a. Examination for the course is in the following manner: measurement of knowledge takes place through: written examination.

If the instruction is in English, the examination may also be conducted in English.

b. Grading is carried out according to a 7-point scale related to learning objectives:

A = Excellent

B = Very Good

C = Good

D = Satisfactory

E = Sufficient

Fx = Fail

F = Fail

- c. Grading criteria for the course will be distributed at the start of the course.
- d. A minimum grade of E is required to pass the course, together with:
- •approved laboratory exercises and group discussions
- •participation in all compulsory education
- e. Students who fail an ordinary examination are entitled to sit additional examinations as long as the course is offered. There is no restriction on the number of examinations. Examinations also include other obligatory elements of the course. Students who have passed an examination may not resit it in order to achieve a higher grade. Students who have failed on two occasions are entitled to request the appointment of a different examiner for the next examination. Any such request must be made to the departmental board. The course has at least two examinations (if required: for each element) for each academic year in the years in which instruction is provided. Intervening years include at least one examination. f. There is no facility to improve the grade Fx to a pass grade in this course.

Interim

Students may request that the examination is carried out in accordance with this syllabus even after it has ceased to apply. This right is limited, however, to a maximum of three occasions during a two-year-period after the end of giving the course. A request for such examination must be sent to the departmental board.

Limitations

The course can not be included in a degree together with the course Microbiology 15 hp (BL4005) or the equivalent.

Misc

The course is part of the Master's programme in Microbiology, but can also be read as a separate course.

Required reading

Course literature is decided by the departmental board and is described in an appendix to the syllabus.