



FCB3004 Higher Seminar in Industrial Biotechnology IV 3.0 credits

Högre seminarium i industriell bioteknologi IV

This is a translation of the Swedish, legally binding, course syllabus.

Establishment

Course syllabus for FCB3004 valid from Spring 2021

Grading scale

P, F

Education cycle

Third cycle

Specific prerequisites

Eligible for studies at the third-cycle level.

Language of instruction

The language of instruction is specified in the course offering information in the course catalogue.

Intended learning outcomes

After completion of the course the student should be able to

- show substantial in-depth knowledge, both broad and specialized, in the overall subject area of biotechnology with emphasis on the scientific subject area of the course
- demonstrate qualified ability to present pedagogically, critically examine and discuss scientific papers in the subject of biotechnology with emphasis on the scientific subject area of the course
- demonstrate deep insight into, and good ability to apply, academic authorship and the international scientific publishing landscape with relevance to the scientific subject area of the course
- demonstrate qualified ability to identify, discuss and reflect on ethics and sustainability aspects in the research that is discussed within the framework of the subject area of the course

Course contents

Industrial biotechnology is a broad research area with a strong connection to sustainable development, where the doctoral students' projects cover both fundamental and applied research within e.g. bioprocess technology, metabolic engineering, biocatalysis, enzyme technology, and identification and characterization of enzymes for sustainable bioprocesses and drug discovery.

The course takes the form of higher seminars in where the doctoral students present, interpret, analyze, critically examine and actively discuss mainly their own work, but also other relevant research literature within the research field. An important aspect is that the research students receive constructive feedback on their own scientific work.

The course aims to provide both broad and specialized knowledge within the students' own research areas in industrial biotechnology and that of the general subject area of biotechnology, as well as knowledge of academic authorship and the international scientific publishing landscape.

Examination

- DEL1 - Participation, 3.0 credits, grading scale: P, F

Based on recommendation from KTH's coordinator for disabilities, the examiner will decide how to adapt an examination for students with documented disability.

The examiner may apply another examination format when re-examining individual students.

If the course is discontinued, students may request to be examined during the following two academic years.

Grading criteria are specified in the course PM.

Other requirements for final grade

Active participation at 80% of the seminar sessions, which includes presenting, preparing and actively participating in reviewing and discussing selected scientific work.

Ethical approach

- All members of a group are responsible for the group's work.
- In any assessment, every student shall honestly disclose any help received and sources used.
- In an oral assessment, every student shall be able to present and answer questions about the entire assignment and solution.