BB2310 Research Topics in Biotechnology 7.5 credits

Aktuella forskningsområden inom bioteknologi

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

Establishment

Course syllabus for BB2310 valid from Autumn 2007

Grading scale

A, B, C, D, E, FX, F

Education cycle

Second cycle

Main field of study

Biotechnology

Specific prerequisites

Language of instruction

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

Intended learning outcomes

The aim of this course is to highlight state-of-the-art biotechnological methods that are used both in academic and industrial context. Students will be assigned a project and guided to discover cutting-edge technologies that can be used to solve real life problems.

The students will actively participate on a literature workshop comprising two parts. The first part is focused on identifying biotechnological methods relevant to the assigned project. The second part of the course will focus on designing an approach to solve real life problems. The subjects will be selected based on information provided by the students (exam work project). During the course the students will both prepare oral presentations on selected topics and will oppose to other presented topics.

The student should after completion and passing the course (grade E) be able to:

- describe and explain latest advances in gene technology, proteomic technology and bioprocess technology at the frontiers of knowledge,
- recognize and explain their application area(s),
- participate in scientific discussions regarding the usefulness of the techniques for a given approach,

Students that achieve greater understanding will obtain higher grades if they are able to:

- design strategies to solve real life problems and critically asses selected strategies by identifying advantages and limitation,
- recognize obstacles raised by employed techniques in analyzing a specific issue and suggest complementing strategies to avoid them,
- identify possible new application areas for biotechnological methods as well as identify future trends in these field.

Course contents

Course literature

Handouts and peer reviewed articles.

Examination

- PRO1 - Project, 7.5 credits, grading scale: A, B, C, D, E, FX, 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.

Other requirements for final grade

Project assignments, written report and oral presentation (PRO1, 7,5 credits, grading scale A-F).
Attendance at all seminars is mandatory.

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.