

BINP40, Bioinformatics: Project 1, 15 credits

Bioinformatik: Projekt 1, 15 högskolepoäng

Second Cycle / Avancerad nivå

Details of approval

The syllabus was approved by Study programmes board, Faculty of Science on 2008-11-14 to be valid from 2008-11-14, spring semester 2009.

General Information

The course is an optional second-cycle course for a degree of Master in Bioinformatics. The language of instruction is English.

Language of instruction: English and Swedish

Main field of studies

Bioinformatics

Depth of study relative to the degree requirements

A1F, Second cycle, has second-cycle course/s as entry requirements

Learning outcomes

On completion of the course the student shall be able to:

- understand a specific bioinformatics research area
- independently plan and carry out a scientific project
- perform experimental work and use scientific methodology within bioinformatics
- write a scientific report independently

Course content

Within the framework of the course a scientific project in bioinformatics is planned, carried out, and presented. The project can be carried out either at a science, medical, or technical faculty, or at a company. Before the project starts, a supervisor should be appointed by the person responsible for the bioinformatics education at the faculty. The work includes experimental design, scientific methodology, evaluation of achieved results, literature studies, report writing, and presentation. The course can in

certain cases also include seminar activity and/or methodology courses.

Course design

The project is planned and carried out by the student in consultation with the supervisor. The course is project-based, which e.g. implies that the student works independently, but in consultation with the supervisor. The project should contain experimental and/or theoretical work and literature studies. The practical training report should be written independently and presented orally as a seminar at the section where the work is carried out.

Assessment

Subcourses that are part of this course can be found in an appendix at the end of this document.

Grades

Marking scale: Fail, Pass, Pass with distinction.

Grading is done by the supervisor in consultation with the person responsible for the bioinformatics education at the faculty.

To pass the entire course, an approved report is required.

The grade is based on the student's ability to

- work independently
- carry out experimental or theoretical work
- organise a written report
- present, analyse and discuss results in a written report

Entry requirements

For admission to the course, English B/English 6 and 150 credits including knowledge corresponding to BINP11 Bioinformatics and Sequence Analysis 7.5 credits, BINP12 Biostatistics 7.5 credits, BINP13 Programming in Perl 7.5 credits, and BINP14 Large-scale Sequence Analysis of Whole Genomes 7.5 credits, is required.

Subcourses in BINP40, Bioinformatics: Project 1

Applies from H08

0801 Bioinformatics: Project 1, 15,0 hp
Grading scale: Fail, Pass, Pass with distinction