



LUND
UNIVERSITY

Faculty of Science

BINP25, Bioinformatics: Project, 7.5 credits

Bioinformatik: Projekt, 7,5 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 bioinformatic research area
- independently plan and carry out a scientific project
- use scientific methodology within bioinformatics
- independently write a scientific report
- write a presentation.

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 the faculty of science or medicine, or at the 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 project report should be written independently and should be presented orally as a seminar at the section where the work was 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.

The 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 6/B is required together with 150 credits which should include knowledge corresponding to:

BINP11 Bioinformatics and Sequence Analysis 7.5 credits, BINP12 Biostatistics 7.5 credits, and BINP13 Programming in Perl 7.5 credits

or

BNF071/BIM083 Bioinformatics 15 credits, BNF072 Programming in Bioinformatics 7.5 credits, BNF078 Expression Analysis 7.5 credits, BNF075 Programming in Bioinformatics II 7.5 credits, BNF073 Statistics in Genetics 3 credits, and BNF079 System Biology 4.5 credits.

Subcourses in BINP25, Bioinformatics: Project

Applies from H08

0801 Project, 7,5 hp
Grading scale: Fail, Pass, Pass with distinction