BB2440 Bioinformatics and Biostatistics 7.0 credits

Bioinformatik och biostatistik

Course syllabus for BB2440 valid from Autumn 10

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

Grading scale: A, B, C, D, E, FX, F
Education cycle: Second cycle
Main field of study: Biotechnology

Intended learning outcomes

This is an introductory course in bioinformatics and biostatistics. After passing the course, the student should:

- know the theory behind fundamental bioinformatics analysis methods.
- be familiar with widely used bioinformatics databases.
- know basic concepts of probability and statistics.
- be able to describe statistical methods and probability distributions relevant for molecular biology data.
- know the applications and limitations of different bioinformatics and statistical methods.
- be able to perform and interpret bioinformatics and statistical analyses with real molecular biology data.

Course main content

Disposition

The course consists of lectures and computer-based laboratory exercises.

Language of instruction

Language of instruction is specified in the course offering information in the course and programme directory.

Eligibility

Literature

- Zvelebil and Baum, Understanding Bioinformatics (2007), Garland Science
- M. J. Crawley, Statistics: An Introduction Using R (Wiley)

This list might be subject to change. Any changes will be announced on the course homepage at least four weeks prior to course start.

Examination

- LAB1 - Laboratory Work, 2.0 credits, grading scale: P, F
- TEN1 - Written Examination, 5.0 credits, grading scale: A, B, C, D, E, FX, F

Requirements for final grade

TEN1 – Written examination, 5.0 credits, grade scale: A, B, C, D, E, FX, F

LAB1 – Laboratory work, 2.0 credits, grade scale: P, F