CB2060 Applied programming for life science 3 1.5 credits

Tillämpad programmering för livsvetenskaperna 3

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

Establishment

Course syllabus for CB2060 valid from Autumn 2019

Grading scale

P, F

Education cycle

Second cycle

Main field of study

Biotechnology, Molecular Life Science

Specific prerequisites

Language of instruction

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

Intended learning outcomes

As a result of taking the course the student will be able to

- Use common scientific software libraries
- Work with version control as a personal backup tool and as a platform for collaboration
- Develop code supported by unit testing
- Document code with community standard tools
- Structure and package code for publishing

Course contents

- Scientific Python libraries: numpy, scipy, pandas
- Workflows with git
- Collaboration in open-source projects using GitHub
- Unit testing with pytest and on-line tools for automatic testing and test coverage
- The Python Package Index

Examination

- LAB1 - Laboratory work, 1.5 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.

Other requirements for final grade

Submission of laboratory assignments

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.