

COURSE DETAIL

ADVANCED COMPUTATIONAL BIOLOGY

Country

United Kingdom - England

Host Institution

University College London

Program(s)

University College London

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Biological Sciences

UCEAP Course Number

176

UCEAP Course Suffix**UCEAP Official Title**

ADVANCED COMPUTATIONAL BIOLOGY

UCEAP Transcript Title

ADV COMPUTATNAL BIO

UCEAP Quarter Units

6.00

UCEAP Semester Units

4.00

Course Description

The course provides an introduction to statistical and computational methods of analyzing and interpreting genetics/genomics data. Emphasis is placed on statistical model application and interpretation. Students learn how to implement various statistical methods, analyze and visualize genetic data through programming in R and command line tools. The emphasis is on students doing analyses in class, and on the interpretation of the results. Programming forms a major part of this course. Students learn how to write their own scripts to perform advanced statistical analyses of genetic data. This is an advanced, fast-paced course with extensive programming assignments. We strongly advise students with no previous programming experience to undertake the R crash course. A short introduction to R at the start of the module will be given. If enrolling on the module with no previous programming knowledge, please be aware that programming skills can only be obtained through many hours of practice. Good performance in the course is dependent upon additional private study to further develop programming skills.

Language(s) of Instruction

English

Host Institution Course Number

BIOL0050

Host Institution Course Title

ADVANCED COMPUTATIONAL BIOLOGY

Host Institution Campus

University College London

Host Institution Faculty

Host Institution Degree

Host Institution Department

Biosciences

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