

COURSE DETAIL

DATA SCIENCE METHODS IN 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

149

UCEAP Course Suffix

N

UCEAP Official Title

DATA SCIENCE METHODS IN BIOLOGY

UCEAP Transcript Title

DATA SCIENCE IN BIO

UCEAP Quarter Units

6.00

UCEAP Semester Units

4.00

Course Description

Computational biology and data science have undergone tremendous expansion in recent years, resulting from increased computational power and accessibility of quantitative biological measurements. The course teaches students about the power of mathematical, computational, and statistical analyses, and their roles in biological research. This is achieved through sessions that combine lectures, paper-and-pen calculations, and computer practicals. Topics include data carpentry, handling, modelling, and data analysis using different types of biological measurements from the areas of Genomics, Evolutionary Biology and Biodiversity research. Students gain confidence in searching and curating real-life datasets, constructing mathematical models, and combining them to answer biological questions that are inaccessible without the use of computers or mathematics.

Language(s) of Instruction

English

Host Institution Course Number

BIOL0053

Host Institution Course Title

DATA SCIENCE METHODS IN BIOLOGY

Host Institution Course Details

<https://www.ucl.ac.uk/module-catalogue/modules/data-science-methods-in-biology-...>

Host Institution Campus

Host Institution Faculty

Host Institution Degree

Host Institution Department

Divison of Biosciences

Course Last Reviewed

2024-2025

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