# 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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