COURSE DETAIL

ADVANCED STATISTICS AND MACHINE LEARNING FOR BIOSCIENCES

Country

United Kingdom - England

Host Institution

University College London

Program(s)

University College London

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Statistics Computer Science

UCEAP Course Number

170

UCEAP Course Suffix

UCEAP Official Title

ADVANCED STATISTICS AND MACHINE LEARNING FOR BIOSCIENCES

UCEAP Transcript Title

ADV STATS/BIO SCI

UCEAP Quarter Units

6.00

UCEAP Semester Units

4.00

Course Description

In this course, students learn the skills to write Python code to implement statistical and machine learning algorithms that can be applied in a range of contexts. Each week the course covers an aspect of computer coding using examples and exercises that drawn on bioscience contexts. Topics will include: probability, maximum likelihood, Bayes theorem, supervised learning: regression and classification, unsupervised learning: dimensionality reduction and clustering, model evaluation and improvement, reinforcement learning, and neural networks and deep learning.

Language(s) of Instruction

English

Host Institution Course Number

BIOS0040

Host Institution Course Title

ADVANCED STATISTICS AND MACHINE LEARNING FOR BIOSCIENCES

Host Institution Campus

University College London

Host Institution Faculty

Host Institution Degree

Host Institution Department

Biosciences

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