COURSE DETAIL

BIOINFORMATICS

Country
United Kingdom - England

Host Institution
University of London, Royal Holloway

Program(s)
University of London, Royal Holloway

UCEAP Course Level
Upper Division

UCEAP Subject Area(s)
Computer Science

UCEAP Course Number
112

UCEAP Course Suffix

UCEAP Official Title
BIOINFORMATICS

UCEAP Transcript Title
BIOINFORMATICS

UCEAP Quarter Units
6.00

UCEAP Semester Units
4.00

Course Description

This course explores the main approaches currently in use in bioinformatics, with special emphasis on the analysis of DNA and protein sequences emerging from genome sequencing projects and genome-wide experimental assays. Topics include basic molecular biology: exploration into the basic components of living cells, their functions, and interactions, as well as other concepts essential to understanding the use of computers in biology, sequence alignments, substitution matrices, phylogenetic trees, dynamic programming, systems biology, gene expression analysis, protein-protein interaction analysis, biological networks, and clustering.

Language(s) of Instruction

English

Host Institution Course Number

CS3110

Host Institution Course Title

BIOINFORMATICS

Host Institution Campus

Royal Holloway, University of London

Host Institution Faculty

Host Institution Degree

Host Institution Department

Computer Science

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