COURSE DETAIL

ADVANCED BIOINFORMATICS
Country Netherlands
Host Institution Wageningen University and Research Center
Program(s) Wageningen University
UCEAP Course Level Upper Division
UCEAP Subject Area(s) Computer Science
UCEAP Course Number 132
UCEAP Course Suffix
UCEAP Official Title ADVANCED BIOINFORMATICS
UCEAP Transcript Title ADVANCD BIONFORMATC
UCEAP Quarter Units 5.00
UCEAP Semester Units 3.30

Course Description

This course covers the process of bioinformatics data analysis and the interpretation of the results in a biological context. The following topics will be addressed in the course: command line usage; programming/scripting; current bioinformatics data analysis tools; and automated analysis pipelines. The first part of the course covers command line usage (linux), bioinformatics script programming (python), as well as the theory and tools required to analyze data produced by current sequencing technologies and interpret the results. Topics include genome assembly, sequence annotation, gene expression, biological networks, and comparative genomics. During the second part of the course, students - in teams - apply their knowledge in a small research project. Given a specific biological question and the required data, the goal is to build a data analysis pipeline and describe the biological interpretation. BIF20306 Introduction to Bioinformatics or SSB34306 Computational Biology and BIF21806 Practical Computing for Biologists or INF2306 Programming in Python required.

Language(s) of Instruction
English

Host Institution Course Number
BIF30806

Host Institution Course Title
ADVANCED BIOINFORMATICS

Host Institution Course Details
https://wur.osiris-student.nl/onderwijscatalogus/extern/cursus

Host Institution Campus
Wageningen University and Research Center

Host Institution Faculty

Host Institution Degree

Host Institution Department

Course Last Reviewed
2025-2026

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