COURSE DETAIL

INTRODUCTION TO COMPUTATIONAL BIOLOGY
Country Singapore
Host Institution National University of Singapore
Program(s) National University of Singapore
UCEAP Course Level Upper Division
UCEAP Subject Area(s) Computer Science Biological Sciences
UCEAP Course Number 155
UCEAP Course Suffix
UCEAP Official Title INTRODUCTION TO COMPUTATIONAL BIOLOGY
UCEAP Transcript Title COMPUTATIONAL BIOL
UCEAP Quarter Units 6.00
UCEAP Semester Units 4.00

Course Description

This course aims to develop flexible and logical problem-solving skills, understanding of main bioinformatics problems, and appreciation of main techniques and approaches to bioinformatics. Through case studies and hands-on exercises, students (i) master the basic tools and approaches for analysis of DNA sequences, protein sequences, gene expression profiles, etc. (ii) understand important problems and applications of computational biology, including identifying functional features in DNA and protein sequences, predicting protein function, and deriving diagnostic models from gene expression profiles, (iii) be confident to propose new solutions to both existing and emerging problems in computational biology. This course requires students to take prerequisites.

Language(s) of Instruction
English

Host Institution Course Number
CS2220

Host Institution Course Title
INTRODUCTION TO COMPUTATIONAL BIOLOGY

Host Institution Course Details
https://www.comp.nus.edu.sg/~wongls/courses/cs2220/

Host Institution Campus

Host Institution Faculty

Host Institution Degree

Host Institution Department
Computer Science

Course Last Reviewed
2025-2026

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