

COURSE DETAIL

INTRODUCTORY BIOINFORMATICS

Country

Singapore

Host Institution

National University of Singapore

Program(s)

National University of Singapore

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Biological Sciences

UCEAP Course Number

129

UCEAP Course Suffix**UCEAP Official Title**

INTRODUCTORY BIOINFORMATICS

UCEAP Transcript Title

INTRO BIOINFORMATIC

UCEAP Quarter Units

6.00

UCEAP Semester Units

4.00

Course Description

This course introduces the concepts, tools and techniques of bioinformatics to understand molecular evolution, individualized medicine, and data intensive biology. The course includes a conceptual framework for modern bioinformatics, an introduction to key bioinformatics topics such as databases and software, sequence analysis, pairwise alignment, multiple sequence alignment, sequence database searches, and profile-based methods, molecular phylogenetics, genomic analysis and personal genomics. Lectures include hands-on inquiry using bioinformatics tools in the practical sessions. The course requires students to take a prerequisite of General Biology.

Language(s) of Instruction

English

Host Institution Course Number

ZB2101

Host Institution Course Title

INTRODUCTORY BIOINFORMATICS

Host Institution Course Details

<https://nusmods.com/courses/ZB2101/introductory-bioinformatics>

Host Institution Campus

Host Institution Faculty

Host Institution Degree

Host Institution Department

Biological Sciences

Course Last Reviewed

2024-2025

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