

## 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 Campus

### Host Institution Faculty

### Host Institution Degree

### Host Institution Department

Biological Sciences

[Print](#)