

COURSE DETAIL

GENES, GENOMES, AND BIOMEDICAL IMPLICATIONS

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

132

UCEAP Course Suffix**UCEAP Official Title**

GENES, GENOMES, AND BIOMEDICAL IMPLICATIONS

UCEAP Transcript Title

GENES & GENOMES

UCEAP Quarter Units

6.00

UCEAP Semester Units

4.00

Course Description

This course deals with the structure, organization and function of genes and genomes in both prokaryotes and eukaryotes (e.g. DNA topology, hierarchy of packaging of DNA in chromosomes and relationship to gene activity and genome dynamics). The functional roles of DNA regulatory cis-elements and transcription factors involved in gene expression is examined. The molecular events in the control and regulation of transcription; post-transcriptional modifications and RNA processing; temporal and spatial gene expression will be examined in detail. The cause and/or effect of dysfunction of gene expression in diseases is discussed.

Language(s) of Instruction

English

Host Institution Course Number

LSM3220

Host Institution Course Title

GENES, GENOMES AND BIOMEDICAL IMPLICATIONS

Host Institution Course Details

Host Institution Campus

Host Institution Faculty

Host Institution Degree

Host Institution Department

Biological Sciences

Course Last Reviewed

2023-2024

[Print](#)