COURSE DETAIL

GENES, GENOMES AND EVOLUTION
Country Australia
Host Institution University of New South Wales
Program(s) University of New South Wales
UCEAP Course Level Upper Division
UCEAP Subject Area(s) Biological Sciences
UCEAP Course Number 130
UCEAP Course Suffix
UCEAP Official Title GENES, GENOMES AND EVOLUTION
UCEAP Transcript Title GENES/GENOMES/EVOLU
UCEAP Quarter Units 6.00
UCEAP Semester Units 4.00

Course Description

This course examines cutting edge concepts in genetics, genomics and evolution: genome structure (the components and organization of genomes), genomics (genome sequencing and annotation), genome variation and the forces that shape it (mutation, recombination and genetic drift) and applications of genomics (conservation genomics, host-pathogen interactions, genome engineering, and systems biology). Multiple aspects of genome biology will be studied and integrated to understand how genomes function and evolve. Core concepts and methods in genomics, molecular evolution and gene regulation will be supported by an integrated set of workshops, science communication tasks and bioinformatics analysis. Modern research methods will be applied to the analyses of differential gene expression in RNA sequencing datasets.

Language(s) of Instruction
English

Host Institution Course Number
BABS3291

Host Institution Course Title
GENES, GENOMES AND EVOLUTION

Host Institution Course Details

Host Institution Campus

Host Institution Faculty
Biotechnology and Biomolecular Sciences

Host Institution Degree

Host Institution Department

Course Last Reviewed
2024-2025

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