COURSE DETAIL

INTRODUCTION TO NEUROBIOLOGY
Country Hong Kong
Host Institution Hong Kong University of Science and Technology (HKUST)
Program(s) Hong Kong University of Science and Technology
UCEAP Course Level Upper Division
UCEAP Subject Area(s) Biological Sciences
UCEAP Course Number 111
UCEAP Course Suffix
UCEAP Official Title INTRODUCTION TO NEUROBIOLOGY
UCEAP Transcript Title INTRO NEUROBIOLOGY
UCEAP Quarter Units 4.50
UCEAP Semester Units 3.00

Course Description

This course covers the principles of neuroscience with a focus on neural circuits and systems. It begins with the structure and function of neurons, including action potential propagation and synaptic communication, followed by sensory systems such as olfaction, hearing, and vision, exploring how external signals are converted into neural activity and processed in the brain. The course then examines motor control and memory systems. Emphasis is placed on modern research techniques, including functional imaging, optogenetics, and connectomics. Through group projects, participants develop skills in reading, evaluating, and presenting scientific literature, preparing them for research careers or applications in public health and technology.

Language(s) of Instruction
English

Host Institution Course Number
LIFS3240

Host Institution Course Title
INTRODUCTION TO NEUROBIOLOGY

Host Institution Course Details
https://prog-crs.hkust.edu.hk/ugcourse/2025-26/search?keyword=LIFS3240

Host Institution Campus

Host Institution Faculty

Host Institution Degree

Host Institution Department
Life Science

Course Last Reviewed
2025-2026

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