COURSE DETAIL

CELL BIOLOGY AND CELL TECHNOLOGY
Country Hong Kong
Host Institution University of Hong Kong
Program(s) University of Hong Kong
UCEAP Course Level Upper Division
UCEAP Subject Area(s) Biological Sciences
UCEAP Course Number 115
UCEAP Course Suffix
UCEAP Official Title CELL BIOLOGY AND CELL TECHNOLOGY
UCEAP Transcript Title CELL BIOLOGY & TECH
UCEAP Quarter Units 5.00
UCEAP Semester Units 3.30

Course Description
This course studies the structure and function of cells, the principles and applications of cell culture, and instrumentation in biology and biotechnology. Topics include tools for cell studies; light microscopy; principles of confocal microscopy and image analysis; cellular membranes; organelles; cellular transport (ions transport and ions channels); protein and RNA transport; membrane potentials; action potentials; cell junctions; extracellular matrix; cell to cell interactions; cell to matrix interactions; techniques in animal cell culture; mammalian cells in culture; primary and continuous cell lines; cell types and cell growth parameters; media formulation, growth factors, and design of serum-free media; culture lab facilities and sterilization; mechanism of cryopreservation; techniques in plant cell culture; root and shoot culture; explant regeneration; protoplasts and cell fusion; and secondary metabolites.

Language(s) of Instruction
English

Host Institution Course Number
BIOL3402

Host Institution Course Title
CELL BIOLOGY AND CELL TECHNOLOGY

Host Institution Course Details

Host Institution Campus

Host Institution Faculty

Host Institution Degree

Host Institution Department
Biological Sciences

Course Last Reviewed

Print