COURSE DETAIL

MICROSCOPY, BIO-IMAGING
Country Sweden
Host Institution Lund University
Program(s) Lund University
UCEAP Course Level Upper Division
UCEAP Subject Area(s) Biological Sciences Bioengineering
UCEAP Course Number 119
UCEAP Course Suffix
UCEAP Official Title MICROSCOPY, BIO-IMAGING
UCEAP Transcript Title MICROSCOPY&IMAGING
UCEAP Quarter Units 6.00
UCEAP Semester Units 4.00

Course Description

This course provides a theoretical introduction to microscopy, with an emphasis on fluorescence microscopy. Topics include theoretical principles of confocal microscopy and the use of deconvolution in microscopy, an overview of different types of advanced research microscopes as well as imaging methods that are not based on optical microscopes; preparation and optimization of both fixed and live samples for microscopy; microscopic visualization of cellular structures and physiological functions with fluorescent markers; and a theoretical introduction to digital visualization, with an emphasis on fluorescence-based methods and digital imaging. A practical project includes the preparation, documentation, and analysis of microscopy specimens with an oral and written presentation.

Language(s) of Instruction
English

Host Institution Course Number
EXTP60

Host Institution Course Title
MICROSCOPY, BIO-IMAGING

Host Institution Course Details
https://kurser.lth.se/kursplaner/21_22%20eng/EXTP60.html

Host Institution Campus

Host Institution Faculty
Faculty of Engineering

Host Institution Degree

Host Institution Department

Course Last Reviewed
2021-2022

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