UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Optical Microscopy Fundamentals

2627-121R008

Title

Optical microscopy fundamentals

Teacher(s)

Prof. Domenico Salerno

Language

English

Short description

The course will address the fundamental concepts for understanding optical microscopy starting from the notions of resolution and magnification, explaining how these are related to the concept of numerical aperture. The course will explain the concepts underlying the various microscopy techniques most used in the biological field: phase contrast and DIC microscopy, epifluorescence microscopy, confocal and super-resolution. Furthermore, we intend to provide an understanding of the electronic acquisition systems most used to obtain digital images in order to understand how to optimize the acquisition of images and avoid incurring artifacts.

CFU / Hours

1 CFU / 8 hours

Teaching period

Tuesday, 19 January 2027, 9:00 AM – 1:00 PM
Tuesday, 26 January 2027, 9:00 AM – 1:00 PM

Sustainable Development Goals

GOOD HEALTH AND WELL-BEING