UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Histology

2425-1-H4102D088-H4102D025M

Aims

Students will be able to the understand the basic histological techniques, to prepare histological samples for the observation of the structure and ultrastructure of the main biological tissues. There will be the supervision of qualified laboratory staff by using an "on field" approach.

At the end of the clerkship the student will be able to manage a paraffin-embedded organ sample, and then to cut, stain with ematoxilin-eosin and mount a slide for histological examination.

Contents

The students are introduced to the main histological techniques and to the instruments, materials and reagents needed for histological analysis.

Detailed program

Preparation of biological samples for histological analysis, immunohistochemistry, immunofluorescence and ultrastructural analysis

Principles of light microscopy, confocal microscopy and electron microscopy

Blood cytology

Prerequisites

College-level scientific knowledge

Teaching form

Frontal lessons, practical activity in the histology laboratory

(Note: 100% in person activities)

Textbook and teaching resource

Histology: A Text and Atlas, with Correlated Cell and Molecular Biology, 6th Edition by Michael H. Ross PhD, Wojciech Pawlina MD.

Junqueira's Basic Histology: Text and Atlas, Thirteenth Edition by Anthony Mescher.

Semester

2nd term

Assessment method

Assessment of the suitability on the basis of the attendance/participation to the laboratory activities. Knowledge and skills will be further assessed during the “Fundamentals of Human Morphology” examination, with the modalities there described.

Office hours

Mon-Fri, by appointment

Sustainable Development Goals

GOOD HEALTH AND WELL-BEING | QUALITY EDUCATION | GENDER EQUALITY | DECENT WORK AND ECONOMIC GROWTH | REDUCED INEQUALITIES