



UNIVERSITÀ  
DEGLI STUDI DI MILANO-BICOCCA

## COURSE SYLLABUS

### Pathology

2526-2-I0302D012-I0302D042M

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#### Aims

Knowledge and understanding - at the end of the Pathological Anatomy course, the student will be able to understand and integrate interdisciplinary knowledge useful for understanding the pathological research methodologies. Know and understand the areas of application of pathology.

Ability to apply knowledge and understanding - at the end of the course, the student must be able to use the knowledge acquired to understand the potential of pathological anatomy in the medical field.

Autonomy of judgment - at the end of the course, the student will be able to understand the development process of a pathological diagnosis, from the laboratory to the clinic. Know how to put together information from different fields (biology, medicine, technology) to understand and interpret the pathology.

Communication skills - at the end of the course, the student will have acquired adequate scientific terminology and will be able to explain the topics covered in the course with proper language.

Learning skills - at the end of the course, the student will be able to understand and critically evaluate the scientific literature regarding the pathology.

The course will offer an overview of the cultural background and specific features required for a pathologist and for an anatomical pathology Technician. In particular skills of the training course are: specimens in the histological lab (management and preparation phase); histological and cytological diagnosis; the anatomy-pathological report: quality controls in the anatomical pathology laboratory; fine needle aspiration biopsy application, immunohistochemistry, molecular biology and electron microscopy; pathological overview of organ diseases: cardiovascular system (ischemic heart disease and atherosclerosis), respiratory system (pneumonias and tumours), gastrointestinal system (gastritis and ulcer, chronic inflammatory bowel disease, hepatitis, gastrointestinal cancers), urinary system (glomerulonephritis, kidney and bladder cancers); Endocrine system (thyroid and adrenal pathology), hemolympho-poitic system (leukaemia and lymphomas), nervous system (vascular, infectious and neoplastic pathologies); skin and soft tissue

#### Contents

The aim of the course is to provide students with the fundamentals of Pathological basis of organs and apparatus diseases, and provide the proper techniques for their study.

## **Detailed program**

Professional duties of the pathologist and of the Technician. Type of samples processed in the Pathology Unit and diagnostic Pathology: Fixation, sampling. Histologic and cytological diagnosis: the pathologic report. Quality controls in Pathology. Diagnostic applications of fine needle aspiration cytology, immunohistochemistry, molecular biology and electronic microscopy. Systematic review of organ diseases: cardiovascular, respiratory, gastro enteric, urinary apparatus; endocrine, hemopoietic, nervous systems, skin and soft tissues (tumors).

## **Prerequisites**

## **Teaching form**

Practical exercises with tutoring

## **Textbook and teaching resource**

The Teachers will provide educational materials

## **Semester**

second

## **Assessment method**

Oral mandatory after quiz.

QUIZ:

Multiple choices (10 questions, 3 points each)

ORAL SESSION:

- open questions on subjects from lessons
- discussion of quiz results

## **Office hours**

by appointment

**Sustainable Development Goals**

QUALITY EDUCATION | GENDER EQUALITY

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