UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

# COURSE SYLLABUS

## Clinical Biochemistry

**2627-3-H4101D258-H4101D176M**

### Aims

The goal of the course is to provide the students with the tools for the correct use of biochemical tests for the digestive and endocrine system diseases, the elements for the comprehension of their physio-pathologic basis and the definition of their indications and interpretation.

### Contents

The primary goal of the course is to provide students with the pathophysiologic basis to understand the clinical and surgical semeiotics and the physiopathology of the digestive and endocrine system in order to make correlations between the inner mechanisms of diseases and their clinical expression. The student will be able to interpret symptoms, signs and laboratory tests as well as radiologic and endoscopic findings. Clinical tools to understand concepts of organ-limited disease, system involvement or systemic disease will be provide.

### Detailed program

1. Clinical enzymology
2. Liver Enzymes (AST, ALT, GGT, ALP)
3. Other diagnostic enzymes (Amylase, Lipase, CK, LDH, CHE)
4. Acute and chronic viral hepatitis
5. Toxic hepatitis
6. Bilirubin and hyperbilirubinemia
7. Biochemical tests for liver fibrosis
8. Test for the evaluation of thyroid function. Indications and interpretation
9. Laboratory tests for the diagnosis and monitoring of Diabetes Mellitus

10. Laboratory of adrenal glands
11. Laboratory diagnosis of the adenohypophysis and neurohypophysis
12. Diagnostics of the parathyroids
13. Biochemical markers of osteoporosis. Indications and interpretation

## Prerequisites

Propaedeutic skills in General pathology and Immunology

## Teaching form

6 frontal Lectures of 2 hours each

## Textbook and teaching resource

Ciaccio e Lippi Biochimica Clinica e Medicina di Laboratorio Edises 2023

McPherson RA, Pincus MR Henry's Clinical Diagnosis and Management by Laboratory Methods, 23a edizione in lingua inglese. Ed. Elsevier, 2016

Federici G. Medicina di laboratorio ed McGraw-Hill. IV edizione, 2014 Marshall W, Lapsley M., Day A Clinical chemistry ed Mosby. 8a edizione in lingua inglese. Ed. Elsevier, 2016

## Semester

Second semester.

## Assessment method

Evaluation of the knoledges and skills acquired.
Oral discussion on the program

## Office hours

Students can book an appointment with the Faculty by email.

## Sustainable Development Goals

GOOD HEALTH AND WELL-BEING | QUALITY EDUCATION | GENDER EQUALITY