UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Clinical Biochemistry

2324-3-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

Liver injury tests: Patterns of liver injury. Hepatic enzymes, AST ALT GGT ALP . Test for alcoholism. Bilirubin and hyperbilirubinemia . Biochemical test for hepatic fibrosis

Laboratory diagnosis of celiac disease. Indications and interpretation

Biochemical markers of osteoporosis. Indications and interpretation

Laboratory test for thyroid dysfunctions diagnosis and monitoring . Indications and interpretation

Laboratory test for diabetes mellitus diagnosis and monitoring. A1c - diabetes diagnosis and evaluation. Plasmatic and urinary glucose - laboratory vs POCT Microalbuminuria - complication prevision. Autoantibody assays and genetic tests - indications and interpretation

Hemocromocytometric analysis. Indications and interpretation

Test for evaluation of hemostasis. Indications and interpretation

Prerequisites

Propaedeutic skills.

Teaching form

Lectures

Textbook and teaching resource

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

See Syllabus of the entire course

Office hours

Students can book an appointment with the Faculty by email.

Sustainable Development Goals

GOOD HEALTH AND WELL-BEING