UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Clinical Microbiology 1

2324-4-H4101D262-H4101D038M

Aims

The course aims to provide the student with the tools necessary for the correct request of microbiological investigations and for the critical interpretation of the results, both in terms of disease probability and severity and pathophysiological, clinical and prognostic significance.

Contents

Diagnostic tests relating to respiratory, central nervous system, gastrointestinal and genitourinary tract infections. Infections in pregnancy. Of the fetus, newborn and infancy, systemic, heart, bone, joint and skin infections, opportunistic and nosocomial infections. Direct and indirect diagnostic methods and techniques in bacteriology, virology, mycology and parasitology. Evaluation of the in vitro sensitivity of microorganisms to antimicrobial drugs. Discussion of clinical cases.

Detailed program

- The Clinical Laboratory. Principles of organization. Computerization and consultancy.

- How to request for carrying out laboratory analyzes

- General concepts on quality controls. Relevance of quality control in the different branches of laboratory medicine

- Techniques for the sampling and collection of biological materials to be subjected to microbiological analysis

Blood and body fluid tests: urine, cerebrospinal fluid, synovial, pleural, pericardial, peritoneal and amniotic fluid:

sampling and / or collection, physical examination, chemical examination, microscopic examination, microbiological examination, recommended tests and main clinical correlations.

- Self-protection measures to minimize biological and chemical risk in the collection and management of materials to be subjected to laboratory analysis.

- Applications of molecular diagnostics in the Clinical Microbiology laboratory

Clinical cases of Clinical Microbiology

CLINICAL MICROBIOLOGY 1 Direct (eg microscopic and culture examination) and Indirect (Serology) Methodologies and Diagnostic Techniques in: Bacteriology, Virology, Mycology and Parasitology

Evaluation of the "in vitro" sensitivity of microorganisms to antimicrobial drugs.

Prerequisites

Knowledge related to the preparatory courses indicated in the degree program regulations

Teaching form

Lessons

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
Microbiologia Clinica (autori: Mims c., Dockrell HM., Goering RW., Roitt I., Wakelin D., Zuckerman M.) EMSI, 2006, III ed.
Microbiologia Clinica (autore: Cevenini R.) PICCIN.

Didactic material will also be distributed during the lessons

Semester

First Semester

Assessment method

See Syllabus of Laboratory Medicine

Office hours

By appointment requested by e-mail

Sustainable Development Goals

GOOD HEALTH AND WELL-BEING