UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

# COURSE SYLLABUS

## Clinical Microbiology 1

**1920-4-H4101D262-H4101D038M**

### Aims

The goal of the course is to provide the tools for the correct use of microbiological tests, and the definition of their indications and interpretation.

### Contents

Diagnostics of respiratory, CNS, gastro-enteric, genito-urinary infections. Pregnancy and infant infections. Systemic, cardiac, bone, joint and skin infections. Nosocomial infections. Methodologies and diagnostic techniques to use in microbiology, virology, mycology and parasitology. Antibiogram. Discussion of clinical reports.

### Detailed program

Clinical laboratory. Organization principles. Laboratory Informative System.

The correct request of lab tests.

Pre-analytical, analytical and post-analytical variability. Conditions able to affect lab test results.

General rules of Quality assessment and their application in the different sections of lab.

Techniques for the collection of biological fluids/materials to submit to microbiological tests.

Blood and biological fluid analysis: urines, cerebrospinal fluid, synovial, pleural, pericardic, peritoneal and amniotic fluid collection, analysis.

Auto protection measures.

Application of molecular diagnostics to Clinical Microbiology labs.

Case reports of laboratory Clinical Microbiology

Direct and indirect techniques in bacteriology, virology, and parasitology.

Evaluation of in vitro sensitivity of microorganisms to antibiotics.

## Prerequisites

Propaedeutic skills

## Teaching form

Lectures, traineeship

## 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.
Moreover, the teachers will provide educational material.

## Semester

First semester

## Assessment method

Case report analysis. Written and oral test. Multiple choice test (31 questions)

## Office hours

meeting is arranged on request by email