



UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Microbiology and Clinical Microbiology

2425-1-I0102D005-I0102D016M-T1-T5

Aims

MICROBIOLOGY-Acquire the basics of microbiology and clinical microbiology.

Contents

MICROBIOLOGY-At the end of this course, the student will be able to know: concept of acute and persistent infection, pathogenicity and virulence. The methods of direct and indirect contagion. The way of transmission of infections and their spread. Concept of carrier (eg. HBV). The correct way to collect, storage and transport biological sample from patient to laboratory. Approaches to laboratory diagnosis of bacterial and viral infections: direct and indirect diagnosis. Essential features of the main pathogens agents of clinical interest.

Detailed program

MICROBIOLOGY-Diagnosis of microbial infections: specimen collection, direct and indirect clinical diagnosis. Bacterial and viral infections of the respiratory system: streptococcal angina, influenza virus, bacterial and viral pneumonia. Urinary tract infections: cystitis and pyelonephritis. Reproductive diseases: syphilis, gonorrhoea, non-gonococcal urethritis, HPV and Herpes. Bacterial and viral infections of the central nervous system: bacterial and viral meningitis, polio, viral encephalitis. Diseases of the gastrointestinal (staphylococcal intoxication, salmonella, E. coli gastroenteritis, pseudomembranous colitis caused by Clostridium Difficile, Helicobacter and peptic ulcers, viral infections (hepatitis, viral gastroenteritis). Microbial infections of the skin and eyes: Bacteria (staphylococcus, streptococcus, pseudomonas), viruses (HPV, herpes virus), fungi (Candida). Sepsis (some examples).

Prerequisites

Positive evaluation in Biomedical Sciences 1.

Teaching form

The lessons will be held in presence

Textbook and teaching resource

MICROBIOLOGY

Cevenini R., Sambri V. (2004) Microbiologia e microbiologia clinica - Per i Corsi di Laurea in professioni sanitarie, Padova, Piccin.

Eudes Lanciotti (2021) Microbiologia clinica - Quinta Edizione - CEA Casa Editrice Ambrosiana

- FOR ALL THE MODULES: Slides and bibliographic references

Semester

2° Semester

Assessment method

Written examination composed of multiple choice questions and open questions.

In the exam of Biomedical Sciences 2 it is necessary to reach the sufficiency in all 4 disciplines that compose it: Pharmacology, General Pathology, Microbiology, Clinical Biochemistry and Molecular Biology

Office hours

By appointment requested via email

Sustainable Development Goals

GOOD HEALTH AND WELL-BEING

