UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Biomedical Sciences 2

2425-1-I0101D005

Aims

Know the basic mechanisms of the onset of disease and the means of defense. Understand the meaning of the laboratory tests and their clinical relevance. Acquire the basics of pharmacology. Acquire the basics of microbiology.

Contents

Know the underlying causes and pathogenic mechanisms of human diseases, as well as the etiology of the fundamental alteration of the structures, functions and control mechanisms at different levels of integration and acquire the basic knowledge to understand and deal with functional alteration. Control the appropriate terminology to interact with lecturers and, in perspective, with the multidisciplinary team and with patients to meet their health needs. Use the acquired skills to facilitate the development of additional advancement in clinical disciplines.

Learn the basics of drug administration, their absorption and distribution in the body and their elimination. Know how a compound form become a drug and the mechanism of action into the body.

Learn the meaning of the examination laboratory, his scientific and clinical relevance; the contribution of the laboratory in disease prevention, diagnosis, especially in assessments of organ function and patients monitoring; the foundation for interpreting laboratory tests; the influence of the way to collect, transport and storage biological samples on results of the laboratory tests.

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

View course modules

Prerequisites

Positive evaluation in Biomedical Sciences 1.

Teaching form

The lessons are held in presence. Some lessons are held through the Distance Learning mode Teledidattica

Textbook and teaching resource

Textbook are specified in the course modules

Semester

1st Year, 2nd Semester

Assessment method

FOR THE ENTIRE COURSE: Written test composed for each module by multiple choice quizzes, plus open questions. The exam is passed by obtaining a passing grade in all 4 modules.

Office hours

Request an appointment with the teachers by email

Sustainable Development Goals

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