UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Biomedical Sciences 1

2425-1-I0101D001

Aims

The Biomedical Sciences 1 course is divided into 4 modules: Genetics (1 CFU), Biology (1 CFU), Biochemistry (2 CFU) and Anatomy/Histology (4 CFU).
Students will acquire the knowledge of the histological and anatomical bases essential for the study and understanding of human physiology and pathology. He must also know the structure and function of cellular components and the related molecular mechanisms. Chromosomal pathologies; the concepts and methods of transmission of hereditary characters and "non-traditional" pathogenetic mechanisms; the basis for the qualitative and quantitative knowledge of biological phenomena. Chemistry and Biochemistry main concepts will be delivered as well.

Contents

The course aims to provide information for understanding the organization of the human body; to explain how cells and tissues are organized to form organs and systems; to highlight the functional correlations of the micro- and macroscopic anatomy. It also aims to transmit the knowledge of the structure and function of the various components of eukaryotic cells, the molecular mechanisms involved in cell replication, the molecular mechanisms involved in gene expression; chromosomal pathologies; the concepts and methods of transmission of hereditary characteristics "non-traditional" pathogenetic mechanisms, as well as the foundations for the qualitative and quantitative knowledge of biological phenomena for a correct application of therapeutic prescriptions. Chemistry, metabolism and nutrition.

Detailed program

Details are provided in each specific module.

Prerequisites

Teaching form

Frontal lectures. For details, check each module.

Textbook and teaching resource

Details are provided in each specific module.

Semester

1st year, I semester

Assessment method

The Biomedical Sciences 1 course is divided into 4 modules: Genetics (1 CFU), Biology (1 CFU), Biochemistry (2 CFU) and Anatomy/Histology (4 CFU).
The exam consists of a 2-hour written test consisting of two separate tests:

1. **Biology, Genetics and Biochemistry Quiz (4 CFU)**. Total 33 questions relating to the three modules in proportion to the credits of each module. Multiple answer each value 1. Time: 1 hour
2. **Anatomy/Histology Quiz (4 CFU).** Total 29 multiple choice questions (value 1) and one open question (short assay- 4 points). Time: 1 hour
   The final grade will be given by the average of the 2 grades.

Office hours

on appointment. Based on the need, please reach out the teacher of each specific module.

Sustainable Development Goals

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