UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Biomedical Sciences 1

2627-1-I0103D001

Aims

Knowledge and Understanding
Students will develop the ability to critically evaluate information relating to the cellular, molecular, and genetic bases of human diseases, independently distinguishing between different pathogenic mechanisms.

Ability to apply knowledge and understanding
The student will be able to effectively communicate the acquired knowledge regarding the histological, anatomical, genetic, and biochemical bases, using appropriate and clear language, even in multidisciplinary settings and with non-specialist interlocutors.

Learning Skills
The student will develop the skills necessary to independently delve into the topics of genetics, biology, biochemistry, and anatomy, while staying up-to-date on new discoveries and methodologies in the field of biomedical sciences.

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

none

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-hours and 30 minutes written test consisting of:

Biology, Genetics and Biochemistry Quiz (4 CFU). Total 32 questions relating to the three modules . Multiple answer each value 1. Time: 1 hour
Anatomy/Histology Quiz (4 CFU). Total 29 multiple choice questions (value 1) and one open question (short assay- 4 points). Time: 1 hour and 30 minutes
The final grade will be given by grade point average

Office hours

By appointment. Based on the need, please reach out the teacher of each specific module by e-mail.

Sustainable Development Goals

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