UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Biomedical Sciences

2425-1-I0303D002

Aims

The general educational objectives of the integrated teaching of "Biomedical Sciences" are aimed at providing the student with the essential theoretical knowledge of chemistry, biochemistry, biology and genetics with a view to their subsequent professional application.

Contents

The course provides the student with the knowledge of general and organic chemistry necessary for the study of the compounds present in biological systems and also the knowledge of the main metabolic pathways and cellular biochemical mechanisms. The topics of the Course allow the student to acquire notions on the structure and function of pro/eukaryotic cells, thanks to the tools provided by the integration of the most current notions of molecular and cellular biology and to gain knowledge of the basis of formal human genetics, introducing the student to the most basic laboratory techniques used for the diagnostic and research approach of hereditary diseases.

Detailed program

Refer to specific modules

Prerequisites

Teaching form

Teaching takes place in attendance, with lessons and exercises in both in frontal and interactive modes (see individual modules).

Textbook and teaching resource

CHEMISTRY AND BIOCHEMISTRY
M. Stefani, N. Taddei: Chimica Biochimica e Biologia Applicata Zanichelli.
R. Roberti, G. Alunni Bistocchi: Elementi di Chimica e Biochimica McGrawHil
BIOLOGY
Solomon, Berg, Martin. Elementi di Biologia. EdiSES
Bonaldo, Duga, Pierantoni, Riva, Romanelli. EdiSES
MEDICAL GENETICS
Peter J. Russel Genetica Fondamenti
Material will be provided by the teacher

Semester

First semester

Assessment method

Written test. The written test will consist of a CLOSED ANSWERS TEST for the Biochemistry module, a CLOSED ANSWERS TEST for the Biology module, a CLOSED ANSWERS TEST plus open questions for the Chemistry module and for the Medical Genetics module from a CLOSED ANSWER TEST. The final evaluation will take into account the results obtained in the different tests.
For the Bergamo students for the Chemistry and Biology modules, an oral test for the discussion of the written test can be added to the written test, upon request of the teacher or student (details in the description of the modules).

Office hours

By appointment required by mail

Sustainable Development Goals

GOOD HEALTH AND WELL-BEING | QUALITY EDUCATION