



UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Principles of Proteomics

2425-1-H4101D252-H4101D003M

Aims

The student must achieve the knowledge for the purification, isolation and characterization of the proteins

Contents

Primary goal of the course is to provide theoretical and practical basic knowledge to study and to characterised the human proteome

Detailed program

Description of the properties of the proteins that can be used for their isolation. Description of the techniques available for their extraction and purification (solubility, chromatographic techniques such as ion-exchange chromatography, gel filtration, mono and two-dimensional electrophoresis, capillary electrophoresis). Description of the human proteome, of the main proteomics techniques, of its objectives, of the information that can be obtained and the methods used to acquire these information with example of applications in medical science.

Prerequisites

Basic knowledge of chemistry and propaedeutic biochemistry

Teaching form

Lectures and laboratories

2 exercise activities (2 hours) carried out in remote delivery mode.

2 laboratory activity (4 hours) carried out in interactive mode in person.

Textbook and teaching resource

Voet D, Voet JG. BIOCHIMICA Zanichelli; Voet D, Voet JG, Pratt CW, FONDAMENTI DI BIOCHIMICA (2005) Zanichelli;

Educational materials provide by the teacher

Semester

First semester

Assessment method

4 Written quiz questions are present during the exam of the Propedeutical Science.

Office hours

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