

UNIVERSITÀ DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Proteomics and Metabolomics

2425-1-F0901D046

Aims

The course will provide knowledge of proteomics and metabolomics technologies applied to biomedical and clinical investigations.

Contents

The course will provide knowledge of proteomics applied to clinical investigations.

The course will introduce metabolomics technologies and platforms applied to biomedical investigations

Detailed program

Proteomics: please consult the module syllabus Metabolomics: please consult the module syllabus

Prerequisites

Basic knowledge in the field of Chemistry, Biochemistry and Statistics

Teaching form

Teaching method in-person for providing both lessons and exercises: please consult the module syllabus

Textbook and teaching resource

Reviews e and scientific articles published on international journals will be provided during the course. Downard K., Mass spectrometry . A foundation course. Royal Society of Chemistry, 2004 ISBN 0-8504-609-7 Gary Siuzdak, Mass Spectrometry for Biotechnology, Academic Press 1996 Per consultazione: J. H. Gross, Mass Spectrometry. A Textbook, Berlin – Heidelberg, Springer Verlag, 2004 E. De Hoffmann, V. Stroobant, Mass Spectrometry. Principles and Application, 2nd Edition Chichester, John Wiley & Sons, 2001. C. Dass, Principles and Practice of Biological Mass Spectrometry, New York, Wiley-Interscience, 2000. ISBN 0471330531 Chapman, John R. Mass Spectrometry of Proteins and Peptides, Humana press 2000, ISBN 0-89603-609-X Walker, John M. The Proteomics Protocols Handbook Humana Press, 2005

Semester

Second semester

Assessment method

Among the 8-10 questions are included in the written-oral test on the contents of the course of Proteomics and Metabolomics. The questions are quiz with 4-5 possible answers of which only one is correct. Among them, there is always an open one and some that may require the execution of calculations or interpretation of mass spectrums (MS / MS) of peptides. The oral examination will be done based on the written/orals questions.

Office hours

Every day upon appointment

Sustainable Development Goals

GOOD HEALTH AND WELL-BEING