



UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

SYLLABUS DEL CORSO

Tirocinio di Orientamento

2223-1-F0901D056

Aims

- Competence acquisition in the use of basic laboratory equipment
- Competence acquisition in technologies used in research laboratories
- Preparation to choose the internship in line with the professional profile that the student aims to develop
- Knowledge of the stage and traineeship offer for the preparation of the graduation thesis
- Knowledge of the training programs to perform research project in foreign countries

Contents

- Practical laboratories for knowledge and use of instrumentation and laboratory techniques
- Attendance in freely chosen scientific seminars
- Presentation of the internal and external training offer of professors and researchers who have available training projects for thesis in Medical Biotechnology
- Presentation of research centers and institutes for master thesis.

Detailed program

The course aims to provide students:

- basic notions for the correct use of the instruments commonly used in a research laboratory, such as variable volume micropipettes, serological pipettes and automatic pipettors for liquids dispensation, vortex, bench centrifuges, magnetic stirrers, analytical balance, with practical exercises of use;
- basic notions on some techniques used in research laboratories, specifically SDS-PAGE, Real Time PCR, Flow cytometry, Immunofluorescence by confocal microscopy, Cell cultures; each topic has an

introductory theoretical part (2 hours) and a practical experience in the laboratory;

- preparatory information for the internship for the preparation of the graduation thesis, with explanation by professors/researchers of both internal and external training projects and the related access methods, also in foreign countries.

Prerequisites

None

Teaching form

In the Covid-19 emergency phase, lectures will be offered in mixed mode:

- synchronous video recorded lessons
- laboratory training by organizing repetitions for groups of a few students
- webinars

Textbook and teaching resource

- Slides presented during synchronous video recorded lessons
- Slides and papers discussed during webinars

The teaching resources will be made available to students via the e-learning platform

Semester

First semester

Assessment method

Certification of course attendance; no *in itinere* tests

Office hours

Upon request: francesca.raimondo@unimib.it

Sustainable Development Goals

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