

## COURSE SYLLABUS

### Internship Orientation

2021-1-F0901D056

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#### 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 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 (2 hours);
- 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:

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

## **Textbook and teaching resource**

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

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## **Semester**

First semester

## **Assessment method**

Certification of course attendance; no *in itinere* tests

## **Office hours**

Upon request: francesca.raimondo@unimib.it

