

UNIVERSITÀ DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Genetics II

2425-1-H4102D002-H4102D009M

Aims

The course provides theoretical knowledge and practical training on molecular biology techniques related to nucleic acids analysis for medical research.

Contents

Learning of the most common molecular biology techniques

Detailed program

The course will develop around the following technologies:

- **Nuclei acids extraction**: isolation of total RNA from human cells, quantification of yield and purity using a spectrophotometer, analysis of RNA integrity by agarose gel electrophoresis.
- Polymerase chain reaction (PCR): reaction set up, analysis of the product by agarose gel electrophoresis.
- DNA restriction: reaction set up, analysis of the products by agarose gel electrophoresis.

Prerequisites

Basic sciences

Teaching form

Three five-hour interactive practical training sessions delivered in presence.

Textbook and teaching resource

Slides employed to provide some knowledge of the techniques will be handed out.

Semester

Second semester

Assessment method

The topics will be part of the final integrated oral examination (further details are reported in the Syllabus of the entire course).

Office hours

By appointment

Sustainable Development Goals

GOOD HEALTH AND WELL-BEING | QUALITY EDUCATION