



UNIVERSITÀ  
DEGLI STUDI DI MILANO-BICOCCA

## COURSE SYLLABUS

### Genetics

2425-1-I0201D127-I0201D035M

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#### Aims

The course aims at developing the students' understanding of the basic concepts in genetics, , especially in the field of human diseases

#### Contents

Genes, chromosomes and their behavior during cell division and cell life. The transmission of genes: The laws of heredity. The human cariotype and chromosomal pathologies. Main examples of human diseases on a genetic basis.

#### Detailed program

- Organization of the genes and the human genome. Human chromosomes and the study of normal and pathological human caryotypes.
- Cell division for cell growth and reproduction (mitosis and meiosis)
- Errors in chromosomal mechanics
- Heredity and Mendel's Laws
- The transmission of genes/Mendelian diseases in human trees

## **Prerequisites**

Scientific knowledge at high school level

## **Teaching form**

4 frontal lectures (2 hours each) in attendance.

## **Textbook and teaching resource**

All materials shown during lectures will be published in e-learning

## **Semester**

First Semester

## **Assessment method**

Written exam aimed at verifying the acquisition of notions indicated in the program: 15 multiple choice questions. The correctness and consistency of the answers with respect to the question requested will be assessed. The exam will be performed only at the end of the course (no intermediate examination will be available). Although this course is held in Italian, for Erasmus students, students can take the exam in English if they wish to do so.

## **Office hours**

by appointment by email request  
angela.bentivegna@unimib.it

## **Sustainable Development Goals**

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

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