UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

# COURSE SYLLABUS

# Cell and Molecular Biology

**2425-1-H4102D006-H4102D018M**

## Aims

The course will provide support for essential theoretical knowledge in molecular and cellular biology, focusing on its current and future applications in the biomedical field. Specifically, this module will be focused on understanding and presenting scientific articles.

## Contents

Discussion and presentation of scientific articles concerning biotechnological techniques and their applications in the biomedical field.

## Detailed program

The course will include an in-depth study of major topics in cellular and molecular biology and genetics. During the course, commonly used experimental biology techniques and/or innovative techniques and their applications in biomedical research will be discussed. This will be done through the reading, understanding, and discussion of particularly significant scientific articles provided by the professor, that utilize these methodologies to address specific biological questions. Students will be asked to organize into groups and prepare a PowerPoint presentation on a scientific article, which will serve as a basis for a group discussion on the scientific topics presented.

## Prerequisites

Basic scientific knowledge (basic biology, chemistry, physics)

## Teaching form

All activities will be conducted in person.

- 3 practice sessions of 4 hours each conducted interactively in person
- 1 practice session of 3 hours conducted interactively in person
  The course will be taught in English.

## Textbook and teaching resource

Primary research articles and reviews, which will be supplied by the professor.

## Semester

First semester

## Assessment method

The following competencies will be assessed: theoretical knowledge in cellular biology, molecular biology, and genetics; ability to understand scientific articles in the biomedical field; communication and presentation skills of scientific articles in the biomedical field.
The assessment will be based on an in-depth analysis of a scientific article. During the course, students will be asked to form working groups, and each group will be assigned a scientific article. Each group will then need to prepare a PowerPoint presentation that will be presented by the students in class, serving as the basis for a group discussion on the scientific topics addressed. The course will be considered passed once this in-depth work, presentation, and discussion have been completed.

## Office hours

By appointment upon e-mail arrangement with the professor (emanuele.azzoni@unimib.it)

## Sustainable Development Goals

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