

# UNIVERSITÀ DEGLI STUDI DI MILANO-BICOCCA

### **COURSE SYLLABUS**

## **Biology**

2122-1-I0202D138-I0202D126M

#### **Aims**

The course aims at developing the students' understanding of the basic mechanisms that regulate molecular organization, cellular and Subcellular morphology.

#### **Contents**

The cell.

Organization of cellular space. The cytoplasmic membrane. The

mitochondria. Meaning of biological macromolecules. Molecular

mechanisms essential to cellular life.

#### **Detailed program**

The cell as a functional unit. Organization of cellular space in functional compartments. The cytoplasmic membrane as protection, selection and mediation structure. The power source of the cell: the mitochondria.

Meaning of biological macromolecules (DNA, RNA, proteins, lipids, carbohydrates). Cellular junctions and signal transmission. Molecular mechanisms essential to cellular life. DNA replication. RNA transcription. Protein synthesis

Prerequisites
None
Teaching form
Lectures.
Lessons will be held in presence, unless further COVID-19 related restrictions are imposed.
Textbook and teaching resource
Resources distributed during the course by the teacher and published in e-learning
Compater
Semester
First semester
Assessment method
Written exam: 15 quizzes with multiple choice.
Office hours
Reception by appointment