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

Semester

First semester

Assessment method

Written exam: 15 quizzes with multiple choice .

Office hours

Reception by appointment