UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Biology

2021-1-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

Lessons in the presence of the teacher.

During the Covid-19 emergency period lessons will take place according to the indications that will be provided to students by the degree course and according to the published timetable. Lessons will be held in mixed mode with the partial presence of the students and a ynchronous streaming link via webex (for student not admitted in the classroom). The webex link will be made available on the elearning page of the course.

All the lessons will be videotaped and made available asynchronously on elearning over the course of a day.

Textbook and teaching resource

Resources distributed during the course by the teacher and published in e-learning

Semester

First semester

Assessment method

Written exam: quizzes with single / multiple choice and open questions.

During the Covid-19 emergency period the exam will take place electronically with proctoring control.

Office hours

Reception by appointment