UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Biology

2223-1-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 will be in attendance, subject to any ministerial changes following the COVID pandemic situation```

Although this course is held in Italian, for Erasmus students, course material can also be available in English, and students can take the exam in English if they wish to do so.

Textbook and teaching resource

Detailed information on teaching resource will be published in the e-learning page associated with the cours.

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

Reception by appointment

Sustainable Development Goals

GOOD HEALTH AND WELL-BEING