UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Physics

2425-1-I0201D129-I0201D186M

Aims

KINEMATICS: The student must be able to: - Describe the physical laws of linear and parabolic motion. - Describe the laws of statics of rigid bodies - Describe the law of conservation of mechanical energy.

Contents

The aim is to teach the student to accurately describe the articular motion of the human body using correct terminology. The course has the objective to develop in the student the knowledge of human motion.

Detailed program

- Vectors and scalars
- Kinematics of a particle
- Parabolic motion
- Forces and dynamics
- Weight and elastic Forces
- Work
- Kinetic energy
- Potential energy and conservation of mechanical energy
- Statics of rigid bodies with application to the human body
- Levers

Prerequisites

Basic knowledge of mathmatics

Teaching form

Standard teaching in presence: topics are discussed by the teacher in the classroom
Integrated teaching in presence: students will perform exercises and presentations to deepen the topics proposed by the teacher.

Textbook and teaching resource

D. Scannicchio, Esercizi e problemi di Fisica, Edizioni Unicopli - D. Scannicchio, Fisica Biomedica, EDISES

Semester

First semester

Assessment method

Test : open-ended questions. Weighted number of questions compared to those of the other integrated teaching modules

Office hours

By appointment

Sustainable Development Goals

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