

# UNIVERSITÀ DEGLI STUDI DI MILANO-BICOCCA

## **SYLLABUS DEL CORSO**

## **Fisica**

2425-1-I0202D134-I0202D140M

#### **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
In person
Textbook and teaching resource
D. Scannicchio, Esercizi e problemi di Fisica, Edizioni Unicopli - D. Scannicchio, Fisica Biomedica, EDISES
Semester
First semester
Assessment method
Written examination with numerical open questions.
Office hours
By appointment
Sustainable Development Goals