

# UNIVERSITÀ DEGLI STUDI DI MILANO-BICOCCA

# **COURSE SYLLABUS**

# **Applied Physics**

2425-1-I0303D040-I0303D002M

#### **Aims**

The general aims of the course are to provide students with basic knowledge of Physics, and Physics of radiation, necessary to carry on their profession.

#### **Contents**

The aim of the course is to provide students with basic knowledge of Physics and Physics of Radiation

### **Detailed program**

Unit of measurement and changes of the unit of measurement. Vector and scalar quantities. Operations with vectors and vector properties. Concept of force, moment of a force. Equilibrium of a rigid body, examples of the equilibrium of the human body. The levers and their application. Elements of geometrical optics. Electromagnetic waves and electromagnetic radiation spectrum. Elements of Physical optics: absorption and scattering of light. Beer-Lambert law.

### **Prerequisites**

## **Teaching form**

12 lessons of 2 hours carried out in attendance (b	both frontal a	and interactive	modality)
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# Textbook and teaching resource

- D. Scannicchio, Fisica Biomedica, EDISES
- D. Scannicchio, Esercizi e problemi di Fisica, Edizioni Unicopli
- U.Amaldi, Fisica delle radiazioni, Boringhieri

Teachers will provide other educational material

#### Semester

First Semester

#### **Assessment method**

20 questions (both numerical exercises and multiple choice questions) on Applied Physics and General Physics; 30 questions (both numerical exercises and multiple choice questions) on Radiation Physics to check preparation on the exam programme.

### Office hours

By appointment required by mail

### **Sustainable Development Goals**

GOOD HEALTH AND WELL-BEING | QUALITY EDUCATION