



UNIVERSITÀ  
DEGLI STUDI DI MILANO-BICOCCA

## SYLLABUS DEL CORSO

### Fondamenti di didattica laboratoriale della Fisica

2526-A20-FIA20001

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#### Title

Fundamentals of laboratory teaching of Physics

#### Teacher(s)

Emiliano Bonera

#### Language

Italian

#### Short description

The courses of Fundamentals of Laboratory Teaching of Physics, Laboratory Teaching of Physics I (Mechanics) and Laboratory Teaching of Physics II (Electromagnetism and Modern Physics) are complementary. The first consists of remote lectures, while the second and third require the presence in the teaching laboratory. The common objectives are:

1. Develop a better understanding of the physical laws from direct observation of phenomena.
2. Learn to face a physics experiment:

- formulation of the problem and study of the necessary instrumentation
- construction of the experimental apparatus and its characterization
- planning the execution and collection of data
- processing the collected data and carrying out a statistical analysis
- critically interpreting the results obtained and production of a scientific report

3. Working in a team:

- communication, coordination, organization, shared management of data, initiative

In-depth materials will be made available on the course's e-learning platform. A specific bibliography will be made available to interested students for those who wish to delve deeper into the topics covered.

You will need to attend at least  $2/3$  of the lectures.

## **CFU / Hours**

2 CFU / 12 hours

## **Teaching period**

Check the timetable for Classe A20

## **Sustainable Development Goals**

QUALITY EDUCATION | GENDER EQUALITY

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