

UNIVERSITÀ DEGLI STUDI DI MILANO-BICOCCA

SYLLABUS DEL CORSO

Fondamenti di didattica laboratoriale della Fisica

2425-A20-FIA20001

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.

CFU / Hours

2 CFU / 12 hours

Teaching period

Check the timetable for Classe A20

Sustainable Development Goals

QUALITY EDUCATION | GENDER EQUALITY