

# UNIVERSITÀ DEGLI STUDI DI MILANO-BICOCCA

# **COURSE SYLLABUS**

# Crystallography and Laboratory of Xray powder diffraction

2526-1-124R021

#### **Title**

Crystallography and Laboratory of X-ray powder diffraction

#### Teacher(s)

Chiara Ferrara : Massimo Moret

#### Language

**English** 

## **Short description**

Program:

- Symmetry in crystals
- Examples of crystalline structures
- Mechanisms of Crystal growth

- Diffraction of X-ray by crystals
- Experimental methods in X-ray: from single crystals to powders

Objectives of the program:

To understand the role of symmetry in periodic structures, basics of crystal growth, theory of diffraction in crystals, the use of diffraction to study solids. To make and interpret experiments on powdered polycrystalline samples.

A final evaluation of the course is expected

#### **CFU / Hours**

2 CFU - 18 Hours (12h lectures - 6h laboratory training)

# **Teaching period**

Il semester

## **Sustainable Development Goals**