

# UNIVERSITÀ DEGLI STUDI DI MILANO-BICOCCA

# **SYLLABUS DEL CORSO**

# Laboratorio di Chimica Organica

2122-3-E1301Q077-E1301Q082M

#### **Aims**

The Organic Chemistry module allows the student to become confident with analytical and preparative chromatographic techniques and with reactivity of organic compounds applied to biological systems.

#### 1. Knowledge and understanding.

At the end of the course, students will know basic theory and experimental of chromatography and chemical transformations of organic compounds.

#### 2. Ability to apply knowledge and understanding.

At the end of the course, students will be able to apply the acquired knowledge to organic compounds transformation and purification.

#### 3. Making judgements.

At the end of the course, students will be able to process what they have learned to general experimental methodologies.

#### 4. Communication skills.

At the end of the course, students will be able to process the experimental data obtained and to describe the procedures and the results, using the most appropriate technical vocabulary.

#### 5. Learning skills.

At the end of the course, students will be able to apply basic experimental techniques of the organic chemistry lab to biomolecules.

#### **Contents**

The organic chemistry module aims to provide the students with basic chromatographic techniques and organic compounds transformation.

### **Detailed program**

The organic chemistry module will be organised in 4 experimental lab sessions, focussed on the following techniques and methodologies:

- ? Thin layer chromatography
- ? Column chromatography
- ? Organic compounds purification and separation through liquid-liquid extraction and partition
- ? Organic compounds reactivity: interconversion of functional groups towards the synthesis of biologically relevant derivatives

# **Prerequisites**

Background: Organic chemistry basics: polarity and solubility, functional groups reactivity. Prerequisites: none.

# **Teaching form**

Lab experimental activities in equipped labs.

# **Textbook and teaching resource**

Slides and experimental protocols will be provided to students at the beginning of the teaching activity, and uploaded on the moodle teaching Platform.

#### Semester

First semester

#### Assessment method

For the Organic Chemistry module, as for all LIB teaching modules, there is no possibility of taking partial or

"module" exams. The assessment method is a written test of 2 hours, to be held in the computer room, through the e-learning platform, and aimed at assessing the skills acquired for each of the 6 modules of the LIB teaching.
Office hours
The teachers will receive by appointment requested by e-mail.