Chim/06 Laboratory of Organic Chemistry 2nd course

Academic year: 2016/2017
Faculty: Dipartimento di Chimica
Study courses: Chemistry (first level)
Study plans/Curricula:
Type:
Total Credits: 4
Didactic Methods: lessons and laboratory experiences
Didactic Period: second year, second semester
Exam type: oral
Professor in charge: Francesco Babudri

Training objectives
Knoweledges on fundamentals of organic chemistry and on the basic operations of the organic laboratory practice (crystallization, distillation, solvent extraction).
Prerequisites
Basic concepts of organic chemistry and knowledge on the reactivity of main functional groups.
Didactic Methods
Lectures and laboratory experiences
Course programme

Theoretical lectures (8h)
Detailed description of the experiences that will be developed in laboratory.

Numerical exercitations in classroom (15h):
Principles of retrosynthetic analysis and application to the synthesis of simple organic compounds.

Laboratory experiences (30h):
Synthesis of simple organic compounds (methyl cinnamate by Perkin condensation, beta-ionon by aldol condensation of citral with acetone). Extraction of biomolecules products from natural products containing them (caffeine from tea leaves, casein and galactose from milk, and mutarotation reaction of the disaccharide).

Reference Texts
Lesson notes and lesson slides (for some arguments)