

## Chim/06 Attività formative affini o integrative

Academic year: 2016/2017

Faculty: Dip. di Bioscienze, Biotecnologie e Biofarmaceutica

Study courses: LM-8 Biotecnologie Industriali e ambientali

Study plans/Curricula:

Type: Affine/Integrativa

Total Credits: 6

Didactic Methods: Lezioni

Didactic Period: Secondo Ciclo Semestrale

Exam type: Scritto

Professor in charge: Maria Annunziata M. Capozzi

### **Training objectives**

To write the synthesis of organic molecules of industrial interest through the retrosynthetic approach and the most important methods of synthesis; to sensitize the student around the connected environmental problem list to the organic synthesis and to appraise sustainable synthetic methodologies.

**Prerequisites** Basic organic chemistry.

**Didactic Methods :**

**Course programme**

PROGRAMME:

Lectures: (40 h)

1. Synthetic strategies for the formation of the C-C bond. Analysis retrosynthetic for the preparation of organic molecules.
2. Synthetic methodologies for the preparation of active molecules optically.
3. Polymers and biopolymer: principal classes of synthetic polymers; biodegradable polymers; modification of biopolymer.
4. Strategies for the realization of chemical reactions to low environmental impact. Polluting organic.
5. Methods of chemical modification of Biomasses for the obtainment of chemical products.

Experimental applications ( 12 h)

**Reference Texts**