Level: bachelor				
Course title: Preparative Organic Chemistry				
Status: elective				
ECTS: 7				

## Requirements: none Learning objectives

Obtaining knowledge about the reactivity of the selected organic compounds. Developing practical skills in getting the different classes of organic compounds. Developing the ability to solve practical problems in organic chemistry.

## **Learning outcomes**

The application of laboratory procedures used in the synthesis of organic compounds. Applying the acquired knowledge to solve practical problems in organic chemistry. Demonstrating the ability for independent and team experimental work.

## **Syllabus**

Theoretical instruction

Theoretical elaboration for preparation of some organic products.

## Practical instruction

Preparation of alkenes from alcohols. Preparation of alkyl halides by reaction of nucleophilic substitution. Preparation of monosubstituted benzene derivatives by electrophilic aromatic substitution. Preparation of disubstituted benzene derivatives. Preparation of ethers by Williamson synthesis. The study of the reactivity of aldehyde groups (Cannizzaro and Perkin reaction). Preparation of dicarboxylic acids. Obtaining derivatives of carboxylic acids – preparation of esters and amides. Preparation of primary amines by Gabriel synthesis. Electrophilic aromatic substitution of anilines.

Weekly teacl	Weekly teaching load			
Lectures:	Exercises:	Other forms of	Student research:	
1	0	teaching:		