Level: specialist studies

Course title: Modern concepts of synthesis of biologically active compounds

Status: elective

ECTS: 5

Requirements: Teacher's analysis of knowledge about the course in Organic synthesis

Learning objectives

Concentrated knowledge about synthesis of biologically active compounds. Understanding structural characteristics of organic compounds and their biological activity. Planning synthesis and mechanisms of biological active compounds. Developing originality and creativity in the synthetic organic laboratory.

Learning outcomes

Demonstrate knowledge about synthesis of some compounds with biological activity. Formulate conclusions about possible products in chemical reaction. Correlation the structures of compounds with their biological activity. Demonstrate the ability to perform theoretical and experimental work independently or in a team.

Syllabus

Theoretical instruction

Planning the multistage synthesis of biological active compounds using the important literature. Synthesis of some compounds with specific reagents and complex experimental techniques. Isolation and physico-chemical investigation of synthesized compounds. Analysing the structures of the synthesized compounds by IR, ¹H, ¹³C NMR spectra.

Practical instruction

Preparing some organic compounds with potential biological activity, synthesis and confirmation of the structures by spectroscopic data.

Weekly teaching load				Other:
Lectures:	Exercises:	Other forms of	Student research:	/
2	/	teaching: 2	/	