#### Level: bachelor

### Course title: CHEMICAL ANALYSIS OF MEDICATIONS

Status: electoral

## **ECTS**: 6

#### **Requirements**: does not have

#### Learning objectives

Introducing students to the legal regulations, the method of analysis and quality control of drugs of different origin and structure. Mastering the procedures of collecting and preparing the sample, depending on the type of analysis as well as its chemical analysis. Developing a way of thinking towards the proper selection of suitable analytical methods for drug analysis. Processing the results obtained and their interpretation. Establishing the connection between the chemical structure and the pharmacological action of the drug.

#### Learning outcomes

The students will be able to find and use the information necessary for proper analysis of the appropriate samples. They will learn to select the appropriate method depending on the requirements of the analyzed sample of the drug and perform the preparation of the sample. Also, they will be able to independently do chemical analysis of the medicines, process and interpret the results obtained.

# **Syllabus**

## Theoretical instruction

Getting acquainted with the legal regulation of medicaments analysis. Procedure in pharmaceutical analysis and control of drugs. Methods of identifying medicinal substances. Analysis of individual drug groups according to Ph. Eur., USP and other pharmacopoeias. Review of methods for the chemical analysis of drugs: titrimetric by conventional, spectroscopic, separation, heating and other modern methods. The correct method selection for the given analysis. Statistical methods in analysis of medicament.

## Practical instruction

Testing and quality control of certain groups of drugs according to official pharmacopoeial procedures. Qualitative analysis of medicinal substances. Application of different classical and instrumental methods in the quantitative analysis of medicament samples from different groups of activities. Examination of medicaments purity.

Weekly teaching load				Other:
Lectures:	Exercises:	Other forms of	Student research:	0
3	2	teaching: 0	0	