



## MEDICAL UNIVERSITY OF PLOVDIV

### FACULTY OF PHARMACY

DEPARTMENT: PHARMACOGNOSY AND PHARMACEUTICAL CHEMISTRY

The program was approved by the Department council with Protocol № 01/09.01.2023

### CURRICULUM

#### FOR PRACTIMUM PHARMACEUTICAL ANALYSIS VII winter semester of the 2023/2024 academic year, IV course

№	TOPIC	DURATION	DATE
1.	Quality assurance of drugs. Good manufacturing practice and Good laboratory practice. Pharmacopeia. Laboratory equipment.	5 hours	15.09.2023
2.	European Pharmacopoeia - Identification reactions of ions and functional groups. Limit tests. Standard solutions.	5 hours	18.09-22.09.2023
3.	Clarity and degree of opalescence of liquids, examination of the degree of coloration of liquids. Other tests, described in European Pharmacopoeia.	5 hours	25.09-29.09.2023
4.	High-performance liquid chromatography. Applications of chromatographic methods in the pharmacopoeial analysis of drug substances. Analysis of related substances.	5 hours	02.10-06.10.2023
5.	Application of gas chromatography in the pharmacopoeial analysis of drug substances.	5 hours	09.10-13.10.2023
6.	Application of thin layer chromatography in the pharmacopoeial analysis of drug substances.	5 hours	16.10-20.10.2023
7.	Colloquium - topics 1-6. Application of infrared spectrophotometry in the pharmacopoeial analysis of drug substances.	5 hours	23.10-27.10.2023
8.	Application of ultraviolet and visible spectrophotometry in the pharmacopoeial analysis of drug substances.	5 hours	30.10-03.11.2023
9.	Application of polarimetry and refractometry in the pharmacopoeial analysis of drug substances.	5 hours	06.11-10.11.2023
10.	Control of the quality of analytical methods. Validation of analytical procedures. Control of errors in analysis. Reporting of results.	5 hours	13.11-17.11.2023
11.	Analysis of drug substances – ethers, aldehydes and ketones. Analysis of drug substances – amines and amino derivatives.	5 hours	20.11-24.11.2023
12.	Analysis of drug substances – hydroxyl derivatives (alcohols and phenols). Analysis of drug substances – carboxylic acids and derivatives.	5 hours	27.11-01.12.2023
13.	Colloquium - topics 7-12. Analysis of drug substances - beta-blockers.	5 hours	04.12-08.12.2023
14.	Analysis of drug substances - furan derivatives. Analysis of drug substances – ACE inhibitors, angiotensin II blockers, calcium channel blockers, peripheral vasodilators and diuretics.	5 hours	11.12-15.12.2023
15.	Analysis of drug substances - Analysis of lipid-modifying drug substances. Analysis of antithrombotic and antihemorrhagic drug substances.	5 hours	18.12-22.12.2023

Approved by: /Head of the Department: Assoc. Prof. K. Ivanov, MPharm, PhD/