Thematic plan of lecture-type classes
in the discipline "Methods of pharmaceutical analysis"
for students of the educational program
of the specialty / area of training 33.05.01 Pharmacy,
profile Pharmacy
(specialist's level),
form of study full-time
for the 2023-2024 academic year

	Topic of lecture type classes (term IV)	Hours (academic)
	General methods of pharmacopoeial analysis.	
1.	Principles of pharmacopoeial analysis[1]. Basic concepts and definitions. State system of quality control of medicines. Regulatory documentation[2].	2
2.	Criteria of pharmacopoeial analysis[1]. General principles of drug identification. Tests for purity and maximum content of permissible impurities. Methods for quantitative evaluation of drugs[2].	2
3.	Methods of physical and chemical analysis[1]. Classification. Physico-chemical properties of solid, liquid andgaseous drugs[2].	2
4.	Types and quality assessment of dosage forms[1]. Regulatory requirements. Pharmacopoeial analysis of single-component dosage forms[2].	2
5.	Pharmacopoeial analysis of multicomponent drug dosage forms[1]. Requirements, procedure[2].	2
6.	Spectral methods of pharmacopoeial analysis[1]. Classification. Characteristic[2].	2
7.	Chromatographic methods of pharmacopoeial analysis[1]. Classification. Characteristic[2].	2
	Total for term	14

	Topic of lecture type classes (term V)	Hours (academic)
	Chemical methods of pharmacopoeial analysis of inorganic drugs	
1.	Pharmacopoeial analysis of inorganic drugs[1]. Compounds ofelements of group VII of the periodic table[2].	2
2.	Pharmacopoeial analysis of inorganic drugs[1]. Compounds ofelements of group VI of the periodic table[2].	2

3	Pharmacopoeial analysis of inorganic drugs[1]. Compoundsof elements of groups V and IV of the periodic table[2].	2
4.	Pharmacopoeial analysis of inorganic drugs[1]. Compounds ofelements of groups III and II of the periodic table[2].	2
5.	Pharmacopoeial analysis of inorganic drugs[1]. Compounds of elements of groups I and VIII of the periodic table. Compounds containing iron, silver and copper[2].	2
6.	Pharmacopoeial analysis of gadolinium complex compounds[1].Analysis of radiopharmaceuticals[2].	2
7.	Identification of drugs in mixtures.	2
	Total for term	14

	Topic of lecture type classes (term VI)	Hours (academic)
	Chemical methods of pharmacopoeial analysis of organic drugs	
1.	Analysis of carboxylic acids[1]. Amino acids. Derivatives of carbonic acids[2].	2
2.	Phenols[1]. Specific reactions of phenols used in pharmaceuticalanalysis. Methods for quantitative assessment of phenols: bromatometry and nitritometry. Aromatic carboxylic acids[2].	2
3.	Sulfonamides[1]. Long-acting sulfonamide preparations[2].	2
4.	Terpenes[1]. Monocyclic terpenoids. Bicyclic terpenoids[2].	2
5.	5-Nitrofuran derivatives as chemotherapeutic agents[1]. Pyrazole derivatives (pyrazolones)[2].	2
	Total for term	10
	Total	38

Considered at the meeting of the department
of Pharmaceutical and Toxicological Chemistry
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