Thematic plan for lecture-type classes
in discipline "Methods of Pharmacopoeial Analysis"
for students of 2023 year of admission
under the educational programme
33.05.01 Pharmacy,
specialisation (profile) Pharmacy
(Specialist's degree),
form of study full-time
for the 2025-2026 academic year

No.	Topics of lecture-type classes	Hours (academic)
4th semester		
1.	Principles of pharmacopoeial analysis [1]. Basic concepts and definitions. State system of quality control of medicines. Regulatory documentation[2].	2
2.	Physical methods of analysis[1]. Boiling point. Melting point[2].	2
3.	Physical methods of analysis[1]. Refractometry, polarimetry[2].	2
4.	Physical and physicochemical methods of analysis[1]. Determination of volatile substances and water. Determination of ash[2].	2
5.	Physical methods of pharmacopoeial analysis[1.] Determination of density, viscosity[2].	2
6.	Pharmacopoeial analysis criteria[1].General principles of testing the authenticity of medicinal substances[2].	2
7.	Purity and limit tests for permissible impurities[1.] Methods for quantitative determination of medicinal substances[2].	2
8.	Methods of physicochemical analysis [1.] Classification. Physicochemical properties of solid, liquid and gaseous medicinal substances[2].	2
9.	Types and quality assessment of dosage forms[1]. Normative requirements. Pharmacopoeial analysis of single-component dosage forms[2].	2
10.	Pharmacopoeial analysis of multicomponent dosage forms[1]. Requirements, procedure[2].	2
11.	Spectral methods of pharmacopoeial analysis [1]. Classification. Characteristics. Atomic emission spectral analysis[2].	2
12.	Spectral methods of pharmacopoeial analysis [1]. Molecular absorption spectroscopy (photometric analysis). Luminescent analysis[2].	2
13.	Chromatographic methods of pharmacopoeial analysis[1]. Classification. Characteristics[2].	2

14.	Chromatographic methods of pharmacopoeial analysis[1]. GLC, HPLC[2].	2
15.	Biological and microbiological methods of analysis[1].	2
16.	Physical and chemical processes,occurring during storage of medicinal products[1].	2
17.	Stability[1]. Shelf life. Increasing stability. (part 1) [2].	2
18.	Stability[1]. Shelf life. Increase Stability (part 2) [2].	2
5th semester		
1.	Pharmaceutical analysis of inorganic compounds1. Methods for determination of main cations and anions[2].	2
2.	Pharmacopoeial analysis of medicinal substances by functional groups1. Pharmacopoeial analysis of synthetic drugs. Hydrocarbons and their derivatives. Analysis of alcohol, ether, and aldehyde preparations[2].	2
3.	Pharmacopoeial analysis of synthetic medicinal products1. Analysis of preparations of aliphatic carboxylic acids and amino acids, phenols[2].	2
6th semester		
1.	Pharmacopoeial analysis of synthetic medicinal products. Aromatic acids and their derivatives. Aromatic amines and their derivatives[2].	2
2.	Pharmacopoeial analysis of synthetic medicinal products. Aromatic sulfonic acids and their derivatives. Sulfonamides. Aromatic amino acids and their derivatives[2].	2
3.	Pharmacopoeial analysis of synthetic drugs. Terpenoids. Furan derivatives. Pyrazole derivatives[2].	2
	Total	48

[1]- topic
[2]- essential content

Considered at a meeting of the Department of Pharmaceutical and Toxicological Chemistry, Pharmacognosy and Botany, protocol of "30" ___May___ 2025 No. _10_.

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