

**Thematic plan of independent work of the student
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**

No	The topic of independent work	Hours (academic)
III year – term 4		
1.	Testing of inorganic medicinal substances ¹ . Classification of medicinal substances by acid-base properties, solubility in water and organic solvents ² .	6
	Testing of inorganic medicinal substances ¹ . Research work on the analysis of the drug dosage form with inorganic compounds (two prescriptions) ² .	9
2.	Methods of quantitative evaluation of drug dosage forms ¹ . The use of refractometry in pharmaceutical analysis ² .	6
	Methods of quantitative evaluation of drug dosage forms ¹ . The use of refractometry in pharmaceutical analysis. Calculations ² .	4.5
	Total for term	25.5
III year – term 5		
3.	Validation of analytical techniques ¹ . Purpose of validation. Types of validation. Special cases of validation according to GMP ² .	6
	Validation of analytical methods ¹ . Validation processes. Main stages of validation. Validation parameters ² .	4.5
4.	Chemical methods of analysis ¹ . Acid value. Characteristic, aims, methodology ² .	3.75
	Chemical methods of analysis ¹ . Iodine value. Characteristics, aims, methods ² .	3.75
	Chemical methods of analysis ¹ . Peroxide value. Characteristic, aims, methodology ² .	3
5.	Pharmacopoeial analysis of ophthalmic dosage forms ¹ . Single-component dosage forms. Characteristics of dosage forms, their advantages and disadvantages. Requirements for eye drops ² .	4.5
	Pharmacopoeial analysis of ophthalmic dosage forms ¹ . Multicomponent dosage forms. Characteristics of dosage forms, their advantages and disadvantages. Requirements for eye drops ² .	4.5
	Total for term	30
III year – term 6		
6.	Pharmacopoeial analysis of organic drugs ¹ . Bis-(β-chloroethyl)-amine derivatives: melphalan ² .	6
	Pharmacopoeial analysis of organic drugs ¹ . Aminobenzoic acid derivatives: metoclopramide, amidotrizoic acid ² .	6

Pharmacopoeial analysis of organic drugs ¹ . Salicylic acid amides: oxafenamide ² .	4.5
Pharmacopoeial analysis of organic drugs ¹ . Synthetic analogues of catecholamines: fenoterol, salbutamol, verapamil ² .	4.5
Pharmacopoeial analysis of organic drugs ¹ . Hydroxypropanolamine derivatives: atenolol, timolol maleate, fluoxetine ² .	4.5
Total for term	25.5
TOTAL	81

Considered at the meeting of the department
of Pharmaceutical and Toxicological Chemistry
"27" may 2023, protocol No9

Head of the Department



Ozerov A.A.