



AMENDMENTS AND CHANGES TO THE CURRICULUM IN THE EDUCATIONAL DISCIPLINE

«Pharmaceutical Chemistry»
for the specialty 1-79 01 08 «Pharmacy»
2023/2024 academic year

Amendments and changes	Basis/Reason
1. No changes were made to the thematic plan and the educational-methodical map	Educational Plan for 2023/2024 academic year
2. No changes were made to the educational and methodological map and the list of lectures and practical exercises	Schedule of training sessions of 2023/2024 academic year
3. The list of practical skills has been updated according to Appendix No. 2	Department meeting of 08.06.2023, protocol № 11.
4. The list of literature recommended for use in the 2023-2024 academic year has been updated according to Appendix No. 1	Department meeting of 08.06.2023, protocol № 11.

The curriculum is revised and approved at the department meeting
Pharmaceutical Chemistry (protocol № 11 08.06.2023)

Head of the Pharmaceutical
Chemistry department
Ph.D., associate professor  R.I. Lukashou


APPROVED
Dean of the Medical Faculty
of International Students,
Ph.D., associate professor  O.S. Ishutin

**List of academic discipline «Pharmaceutical Chemistry» literature
recommended for 2023-2024 academic year**

Basic:

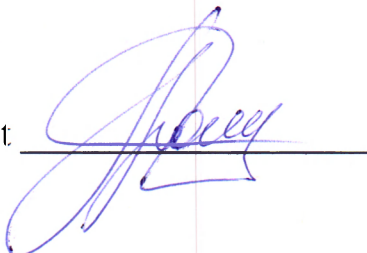
1. Tsurkan O.O. Pharmaceutical chemistry. Analysis of the Medicinal Substances according to Functional Groups : study guide. – Kyiv : AUS Medicine Publishing, 2018. – 152 p.
2. Pharmaceutical analysis : The study guide for students of higher schools / ed. by V. A. Georgiyants. – Kharkiv : NUPh Golden Pages, 2018. – 494 p.

Head of the Pharmaceutical
Chemistry department
Ph.D., associate professor


_____ R.I. Lukashou

AGREED

Head of the Reader Service Department


_____ V.A. Koleda

**List of practical skills in the academic discipline «Pharmaceutical chemistry»
for 2023-2024 academic year**

1. Identification by chemical reactions of ethyl alcohol, ascorbic acid, bendazole hydrochloride, caffeine, potassium chloride, potassium iodide, potassium bromide, magnesium sulfate heptahydrate, procaine hydrochloride, glycerin, phenol, etc.
2. Thin layer chromatography of rutoside trihydrate, atenolol, D,L-methionine, etc.
3. Acidimetric titration of sodium bicarbonate, theophylline-ethylenediamine, etc.
4. Alkalimetric titration of boric acid, salicylic acid, benzoic acid, etc.
5. Iodometric titration of ascorbic acid, copper sulfate pentahydrate, glucose, etc.
6. Nitritometric titration of procaine hydrochloride, sulfanilamide, etc.
7. Complexometric titration of magnesium sulfate heptahydrate, zinc sulfate heptahydrate, calcium gluconate, etc.
8. Argentometric titration of potassium chloride, potassium iodide, etc.
9. Determination of the melting point of nicotinic acid, salicylic acid, resorcinol, procaine hydrochloride, sulfanilamide, etc.
10. Polarimetric determination of ascorbic acid, levomenthol, glucose monohydrate, sucrose, cysteine hydrochloride, D,L-methionine, folic acid, etc.
11. Refractometric determination of glycerol, magnesium sulfate solution, glucose, etc.
12. Spectrophotometric determination of chloramphenicol, atenolol, nitrofurazone, ascorbic acid, etc.
13. Determination of the pH of a solution of ascorbic acid, disodium edetate, glycine, procaine hydrochloride, etc.
14. Determination of the relative density of sulfuric acid, ethyl alcohol 96%, etc.
15. Preparation of reagent solutions ammonium chloride solution R, potassium dichromate solution R, potassium ferricyanide solution R, potassium permanganate solution R, potassium thiocyanate solution R, etc.
16. Evaluation of the appearance and solubility of substances sodium chloride, corn starch, potassium permanganate, glycine, iodine, riboflavin, sulfanilamide, etc.
17. Capillary viscometry of a solution for injection of chondroitin sulfate.
18. Determination of transparency and degree of turbidity of solutions of glycine, hydrated aluminum oxide, etc.
19. Determination of the color of solutions of sodium benzoate, resorcinol, drotaverine hydrochloride, sodium sulfacetamide, etc.
20. Tests for the limiting content of impurities in purified water, in substances of sodium bicarbonate, sodium chloride, etc.

21. Determination of electrical conductivity of purified water, glucose monohydrate, sucrose,

22. Determination of acidity or alkalinity of purified water.

23. Use of chemical reactions to identify metoclopramide hydrochloride, amitriptyline hydrochloride, caffeine sodium benzoate, pyridostigmine bromide, phenylephrine hydrochloride, diphenhydramine hydrochloride, acetylcysteine, etc.

24. Thin layer chromatography of metoclopramide hydrochloride, atenolol, hydrochlorothiazide, metformin hydrochloride, levothyroxine, prednisolone, ethinyl estradiol, etc.

25. Acidimetric titration of sodium thiopental, etc.

26. Alkalimetric titration of amitriptyline hydrochloride, verapamil hydrochloride, diphenhydramine hydrochloride, etc.

27. Iodometric titration of acetylcysteine, captopril, ascorbic acid, etc.

28. Determination of the melting point of caffeine, atenolol, cinnarizine, gliquidone, ethinylestradiol, sulfamethoxazole, trimethoprim, etc.

29. Polarimetric determination of ibuprofen, atenolol, dextromethorphan hydrobromide, prednisolone, etc.

30. Spectrophotometric determination of loperamide hydrochloride, ibuprofen, pyridostigmine bromide, phenylephrine hydrochloride, atenolol, metformin hydrochloride, omeprazole, etc.

31. Determination of the pH of a solution of acetylcysteine, ambroxol, ascorbic acid, doxycycline hyclate, rifampicin, etc.