


Volodymyr GELMBOLDT
“29” august 2024 year

CALENDAR - THEMATIC PLAN OF LECTURES
the course "Pharmaceutical Chemistry " for the third-year students
International Faculty in 2024-2025 academic year

No	Study of subject and content	The amount in hours	Group	Who teaches	Date	Equipment classes	Place of classes
1	2	3	4	5		6	7
1.	Subject and tasks of pharmaceutical chemistry, history of development. The system of evaluation of the quality of medicines. The State Pharmacopoeia of Ukraine, its structure.	2	3	Ivan SHYSHKIN	according to the timetable	The visual material	Department
2.	Physico-chemical methods of analysis in the identification of medicines.	2	3	Ivan SHYSHKIN	according to the timetable	The visual material	Department
3.	Methods of identification of medicines.	2	3	Ivan SHYSHKIN	according to the timetable	The visual material	Department
4.	Methods of quantitative analysis of medicines. Acid-base titration. Complexonometry. Precipitation titration.	2	3	Ivan SHYSHKIN	according to the timetable	The visual material	Department
5.	Methods of quantitative analysis of medicines. Methods of redox titration. Gravimetry.	2	3	Ivan SHYSHKIN	according to the timetable	The visual material	Department
6.	Express analysis of medicines. Modern trends in the development of pharmaceutical analysis.	2	3	Ivan SHYSHKIN	according to the timetable	The visual material	Department
7.	Principles of classification of medicines, their nomenclature. Structure-activity relationship. The main ways of drug metabolism. Prodrugs	2	3	Ivan SHYSHKIN	according to the timetable	The visual material	Department
8.	Basics of the strategy of creating new synthetic medicines.	2	3	Ivan	according	The visual	Department

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9.	Nonsteroidal anti-inflammatory drugs. Characteristics, classification, relationship between structure and pharmacological action, mechanism of action, methods of preparation, methods of analysis, application in medicine.	2	3	Ivan SHYSHKIN	according to the timetable	The visual material	Department
10.	Narcotic analgesics and their analogues. Characteristics, classification, relationship between structure and pharmacological action, mechanism of action, methods of preparation, methods of analysis, application in medicine.	2	3	Ivan SHYSHKIN	according to the timetable	The visual material	Department
11.	Means for anesthesia. Psychotropic drugs. Neuroleptics. Antidepressants. Characteristics, classification, relationship between structure and pharmacological action, mechanism of action, methods of preparation, methods of analysis, application in medicine.	2	3	Ivan SHYSHKIN	according to the timetable	The visual material	Department
12.	Psychotropic drugs. Tranquilizers. Sedative Psychostimulants. Characteristics, classification, relationship between structure and pharmacological action, mechanism of action, methods of preparation, methods of analysis, application in medicine.	2	3	Ivan SHYSHKIN	according to the timetable	The visual material	Department
13.	Psychotropic and hypnotic drugs. Barbituric acid derivatives. Characteristics, classification, relationship between structure and pharmacological action, mechanism of action, methods of preparation, methods of analysis, application in medicine.	2	3	Ivan SHYSHKIN	according to the timetable	The visual material	Department
14.	Anticonvulsant and antiepileptic drugs. Means for the treatment of parkinsonism. Characteristics, classification, relationship between structure and pharmacological action, mechanism of action, methods of obtaining, methods of analysis, application in medicine.	2	3	Ivan SHYSHKIN	according to the timetable	The visual material	Department
15.	Emetics and antiemetics. Antitussives. Nootropic drugs. Antihistamines. Characteristics, classification, relationship between structure and pharmacological action, mechanism of action, methods of preparation, methods of analysis, application in medicine.	2	3	Ivan SHYSHKIN	according to the timetable	The visual material	Department
Total: 30							

**The head of the educational part
of the Department of Pharmaceutical Chemistry
and Drug Technology**



Oleksii NIKITIN