APPROVED Head of the Department of Pharmaceutical Chemistry and Drug Technology

Volodymyr GELMBOLDT "<u>29</u>" <u>august</u> 2024 year

## CALENDAR - THEMATIC PLAN OF PRACTICAL CLASSES from the course "<u>Pharmaceutical Chemistry</u>" for V – year students International Faculty for the 2024-2025 academic year

N⁰ i/o	The topic of the lesson and its content	Volume in hours	Group	Who is conducting	Class equipment	Date of the event	Venue
1	2	3	4	5	6	7	8
1.	Medicines for thyroid hormones, antithyroid drugs.Thyroid hormone preparations: thyroxine, triiodothyronine, thyroidin.Medicines used for hypofunction of the thyroid gland: potassiumiodide.Antithyroid drugs: iodine, diiodotyrosine, mercazolil (thiamazole).	2	4-5	Iryna LYTVYNCHUK, Ivan SHYSHKIN	Presentation Laboratory equipment Reagents	according to the schedule	department
2.	Laboratory work: Analysis of the substance Potassium iodide.	2	4-5	Iryna LYTVYNCHUK, Ivan SHYSHKIN	Presentation Laboratory equipment Reagents	according to the schedule	department
3.	<i>Pancreatic hormone drugs. Insulin.</i> Insulin preparations: Insulin for injection, Suinsulin, Zinc-insulin suspension for injection.	2	4-5	Iryna LYTVYNCHUK, Ivan SHYSHKIN	Presentation Laboratory equipment Reagents	according to the schedule	department
4.	Antidiabetic drugs. Derivatives of sulfonylureas: Butamide, Chlorpropamide, Bucarban, Glibenclamide Biguanides: Metformin hydrochloride, Buformin.	2	4-5	Iryna LYTVYNCHUK, Ivan SHYSHKIN	Presentation Laboratory equipment Reagents	according to the schedule	department
5.	Solving situational and test tasks on pharmaceutical analysis of thyroid hormone drugs, antithyroid drugs, pancreatic hormone drugs, and antidiabetic drugs.	2	4-5	Iryna LYTVYNCHUK, Ivan SHYSHKIN	Presentation Laboratory equipment Reagents	according to the schedule	department
6.	<i>Steroid hormones and their analogues.</i> Characteristics, classification, relationship between structure and pharmacological action, mechanism of action, methods of preparation, methods of analysis, application in medicine.	2	4-5	Iryna LYTVYNCHUK, Ivan SHYSHKIN	Presentation Laboratory equipment Reagents	according to the schedule	department

7.	Hormones of the adrenal cortex and their synthetic analogues.Corticosteroids.Mineralocorticosteroids: Deoxycorticosterone acetate.Glucocorticosteroids: Cortisone acetate, Hydrocortisone acetate.Synthetic analogues of glucocorticosteroids: Prednisone,Dexamethasone, Triamcinolone, Flumethasone pivalate	2	4-5	Iryna LYTVYNCHUK, Ivan SHYSHKIN	Presentation Laboratory equipment Reagents	according to the schedule	department
8.	Laboratory work: Analysis of Prednisolone tab. 5 mg.	2	4-5	Iryna LYTVYNCHUK, Ivan SHYSHKIN	Presentation Laboratory equipment Reagents	according to the schedule	department
9.	Laboratory work: Analysis of cortisone acetate tab. 25 mg.	2	4-5	Iryna LYTVYNCHUK, Ivan SHYSHKIN	Presentation Laboratory equipment Reagents	according to the schedule	department
10.	Androgens, anabolic steroids and their analogues. Testosterone propionate, Methyltestosterone Semi-synthetic and synthetic anabolic agents: Methandienone, Nandrolone phenylpropionate.	2	4-5	Iryna LYTVYNCHUK, Ivan SHYSHKIN	Presentation Laboratory equipment Reagents	according to the schedule	department
11.	Progestogens, estrogens. Birth control. Estrogens of nonsteroidal structure. Estrogenic hormones: Estradiol dipropionate, Estradiol dipropionate Estrogens of nonsteroidal structure: Sinestrol, Diethylstilbestrol. Progestogenic hormones: Progesterone, Pregnin.	2	4-5	Iryna LYTVYNCHUK, Ivan SHYSHKIN	Presentation Laboratory equipment Reagents	according to the schedule	department
12.	Laboratory work: Analysis of Sinestrol solution d/in., oil. 2% 1 ml.	2	4-5	Iryna LYTVYNCHUK, Ivan SHYSHKIN	Presentation Laboratory equipment Reagents	according to the schedule	department
13.	Solving situational and test tasks on the pharmaceutical analysis of steroid hormones and their analogues.	2	4-5	Iryna LYTVYNCHUK, Ivan SHYSHKIN	Presentation Laboratory equipment Reagents	according to the schedule	department
14.	<i>Vitamins are water soluble. Part 1.</i> Ascorbic acid, Calcium pangamate, Calcium pantothenate, Nicotinic acid, Nicotinamide.	2	4-5	Iryna LYTVYNCHUK, Ivan SHYSHKIN	Presentation Laboratory equipment Reagents	according to the schedule	department
15.	Laboratory work: Analysis of the substance Ascorbic acid.	2	4-5	Iryna LYTVYNCHUK, Ivan SHYSHKIN	Presentation Laboratory equipment Reagents	according to the schedule	department
16.	<i>Vitamins are water soluble. Part 2.</i> Pyridoxine hydrochloride, Thiamine hydrobromide and hydrochloride, Folic acid, Riboflavin, Rutin.	2	4-5	Iryna LYTVYNCHUK, Ivan SHYSHKIN	Presentation Laboratory equipment Reagents	according to the schedule	department

17.	<i>Laboratory work:</i> Analysis of Thiamine hydrochloride solution d/in. 50 mg/ml 1 ml.	2	4-5	Iryna LYTVYNCHUK, Ivan SHYSHKIN	Presentation Laboratory equipment Reagents	according to the schedule	department
18.	<i>Laboratory work:</i> Analysis of pyridoxine hydrochloride solution d/in. 50 mg/ml 1 ml.	2	4-5	Iryna LYTVYNCHUK, Ivan SHYSHKIN	Presentation Laboratory equipment Reagents	according to the schedule	department
19.	<i>Fat-soluble vitamins.</i> Retinol acetate, Ergocalciferol, Tocopherol acetate, Vikasol.	2	4-5	Iryna LYTVYNCHUK, Ivan SHYSHKIN	Presentation Laboratory equipment Reagents	according to the schedule	department
20.	Solving situational and test tasks on the pharmaceutical analysis of Vitamins.	2	4-5	Iryna LYTVYNCHUK, Ivan SHYSHKIN	Presentation Laboratory equipment Reagents	according to the schedule	department
	Total	40					

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

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## Oleksii NIKITIN