

CALENDAR-THEMATIC PLAN OF LECTURES

Biological chemistry for 3-d course of study full-time form of education in specialty 226 Pharmacy, Industrial Pharmacy(Language of instructions – English)

Фм22(4.10)англ – 01-02
autumn semester, 2024-2025 a.y.

No	Date	Lesson Name	Hours	Lecturer					
MODULE 2. METABOLISM AND ITS REGULATION									
1.	02.09.2024	Transfer of Genetic Information. Protein Biosynthesis in the Cell. Mechanisms of Protein Biosynthesis Regulation. Antibiotics.	2	ass.prof. Seniuk I.V.					
2.	09.09.2024	Vitamins. Nomenclature and Classification of Vitamins, Chemical Structure and Vitamin's Action Molecular Basis. Vitamin Deficiency.	2	ass.prof. Seniuk I.V.					
3.	16.09.2024	Biochemical bases of reception. Mechanisms of signal transmission inside the cell. General characteristics and classification of hormones and neurotransmitters. Endocrine dysfunction and their pharmaceutical treatment.	2	ass.prof. Seniuk I.V.					
4.	23.09.2024	Metabolic Detoxification Pathways. Liver importance in xenobiotics metabolism. Integration of metabolic pathways.	2	ass.prof. Seniuk I.V.					
	1	Total:	8						

Note: lectures are given on Monday from 16:40 to 18:15, online.

Head of the Department of Clinical Laboratory Diagnostics, Microbiology and Biological Chemistry



Vira KRAVCHENKO



CALENDAR-THEMATIC PLAN OF PRACTICAL LESSONS Biological Chemistry 3-d course of study full-time form of education in specialty 226 Pharmacy, Industrial pharmacy (Language of instructions – English) Фм21(4.10)англ-01, autumn semester, 2024-2025 a.v.

	autumn semester, 2024-2025 a.y.								
No	Date	Lesson Name	Volume in hours	Knowledge Assessment System, points					
			nours	min	max				
CONTENT MODULE 3. FUNDAMENTALS OF MOLECULAR BIOLOGY									
1.	06.09.2024	Conjugated proteins metabolism. Metabolism of Hemoproteins.	4	5	7				
2.	20.09.2024	Conjugated proteins metabolism. Metabolism of Nucleotides and Nucleic Acids.	4	5	7				
3.	04.10.2024	Transfer of Genetic Information. Protein Biosynthesis in the Cell. Mechanisms of Protein Biosynthesis Regulation. Antibiotics.	4	4	6				
		Final test of CM 3 assimilation		10	20				
Total from CM 3					40				
CONTENT MODULE 4. INDIVIDUAL METABOLIC PROCESSES									
4.	18.10.2024	Vitamins. Nomenclature and Classification of Vitamins. Chemical Structure and Functions of Fat-soluble vitamins. Vitamin Deficiency.	4	5	8				
5.	01.11.24	Chemical Structure and Functions of Water-soluble vitamins. Vitamin Deficiency.	4	5	8				
6.	15.11.2024	Biochemical bases of reception. Mechanisms of signal transmission inside the cell. General characteristics and classification of hormones and neurotransmitters.	4	5	8				
7.	29.11.2024	Mechanisms of action of hormones. Endocrine dysfunction and their pharmacocorrection.	4	5	8				
8.	13.12.2024	Metabolic Detoxification Pathways. Liver importance in xenobiotics metabolism.	4	5	8				
9.	10.01.2025 Final Semes	Final test of CM 4 assimilation	2	5	10				
10.		Semester credit of the Module 2 «Metabolism and its regulation».	2	6	10				
Total from CM 4					60				
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Head of the Department of Clinical Laboratory Diagnostics, Microbiology and Biological Chemistry



THE WHOLE NUMBER OF HOURS FOR THE MODULE 2:

Vira KRAVCHENKO

36

60

100



CALENDAR-THEMATIC PLAN OF PRACTICAL LESSONS

Biological Chemistry 3-d course of study full-time form of education in specialty 226 Pharmacy, Industrial pharmacy (Language of instructions – English) Фм21(4.10)англ-02,

autumn semester, 2024-2025 a.y.

	0	autumii semester, 2024-2025 a.y.						
No	Date	Lesson Name	Volume in hours	Knowledge Assessment System, points				
				min	max			
CONTENT MODULE 3. FUNDAMENTALS OF MOLECULAR BIOLOGY								
1.	13.09.2024	Conjugated proteins metabolism. Metabolism of Hemoproteins.	4	5	7			
2.	27.09.2024	Conjugated proteins metabolism. Metabolism of nucleotides and nucleic acids.	4	5	7			
3.	11.10.2024	Transfer of Genetic Information. Protein Biosynthesis in the Cell. Mechanisms of Protein Biosynthesis Regulation. Antibiotics.	4	4	6			
		Final test of CM 3 assimilation		10	20			
		from CM 3	24	40				
	C	ONTENT MODULE 4. INDIVIDUAL METABOLIC PRO	CESSES					
4.	25.10.2024	Vitamins. Nomenclature and Classification of Vitamins. Chemical Structure and Functions of Fatsoluble vitamins. Vitamin Deficiency.	4	5	8			
5.	08.11.2024	Chemical Structure and Functions of Water-soluble vitamins. Vitamin Deficiency.	4	5	8			
6.	22.11.2024	Biochemical bases of reception. Mechanisms of signal transmission inside the cell. General characteristics and classification of hormones and neurotransmitters.	4	5	8			
7.	06.12.2024	Mechanisms of action of hormones. Endocrine dysfunction and their pharmacocorrection.	4	5	8			
8.	20.12.2024	Metabolic Detoxification Pathways. Liver importance in xenobiotics metabolism.	4	5	8			
9.		Final test of CM 4 assimilation	2	5	10			
10.	17.05.2024	Semester credit of the Module 2 «Metabolism and its regulation».	2	6	10			
	Total from CM 4 36 6							
	THE	WHOLE NUMBER OF HOURS FOR THE MODULE 2:	36	60	100			

Head of the Department of Clinical Laboratory Diagnostics, Microbiology and Biological Chemistry



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