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)
Фм21англ – 01-07
autumn semester, 2023-2024 a.y.

No	Date	Lesson Name	Hours	Lecturer
MODULE 2. METABOLISM AND ITS REGULATION				
1.	**08.09.2023**	Transfer of Genetic Information. Protein Biosynthesis in the Cell. Mechanisms of Protein Biosynthesis Regulation.Antibiotics.	2	ass.prof. Seniuk I.V.
2.	**22.09.2023**	Vitamins. Nomenclature and Classification of Vitamins, Chemical Structure and Vitamin`s Action Molecular Basis. Vitamin Deficiency.	2	ass.prof. Seniuk I.V.
3.	**06.10.2023**	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.	**20.10.2023**	Metabolic Detoxification Pathways. Liver importance in xenobiotics metabolism. Integration of metabolic pathways.	2	ass.prof. Seniuk I.V.
		Total:	**8**	

Note: lectures are given on Friday from 10:25 to 12:05, online.

Head of the Department of Biological Chemistry and Veterinary Medicine, professor 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)
Фм21англ-01, autumn semester, 2023-2024 a.y.

No	Date	Lesson Name	Volume in hours	Knowledge Assessment System, points	
				min	max
CONTENT MODULE 3. FUNDAMENTALS OF MOLECULAR BIOLOGY					
1.	**08.09.2023**	Conjugated proteins metabolism. Metabolism of Hemoproteins.	4	5	7
2.	**22.09.2023**	Conjugated proteins metabolism. Metabolism of Nucleotides and Nucleic Acids.	4	5	7
3.	**06.10.2023**	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		24	40
CONTENT MODULE 4. INDIVIDUAL METABOLIC PROCESSES					
4.	**20.10.2023**	Vitamins. Nomenclature and Classification of Vitamins. Chemical Structure and Functions of Fat-soluble vitamins. Vitamin Deficiency.	4	5	8
5.	**03.11.23**	Chemical Structure and Functions of Water-soluble vitamins. Vitamin Deficiency.	4	5	8
6.	**17.11.2023**	Biochemical bases of reception. Mechanisms of signal transmission inside the cell. General characteristics and classification of hormones and neurotransmitters.	4	5	8
7.	**01.12.2023**	Mechanisms of action of hormones. Endocrine dysfunction and their pharmacocorrection.	4	5	8
8.	**15.12.2023**	Metabolic Detoxification Pathways. Liver importance in xenobiotics metabolism.	4	5	8
9.	**12.01.2024**	*Final test of CM 4 assimilation*	4	11	20
		Semester credit of the Module 2 «Metabolism and its regulation».			
		Total from CM 4		36	60
		THE WHOLE NUMBER OF HOURS FOR THE MODULE 2:	**36**	**60**	**100**

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Biological Chemistry 3-d course of study full-time form of education
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(Language of instructions – English)
Фм21англ-02, autumn semester, 2023-2024 a.y.

No	Date	Lesson Name	Volume in hours	Knowledge Assessment System, points	
				min	max
CONTENT MODULE 3. FUNDAMENTALS OF MOLECULAR BIOLOGY					
1.	**15.09.2023**	Conjugated proteins metabolism. Metabolism of Hemoproteins.	4	5	7
2.	**29.09.2023**	Conjugated proteins metabolism. Metabolism of nucleotides and nucleic acids.	4	5	7
3.	**13.10.2023**	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		24	40
CONTENT MODULE 4. INDIVIDUAL METABOLIC PROCESSES					
4.	**27.10.2023**	Vitamins. Nomenclature and Classification of Vitamins. Chemical Structure and Functions of Fat-soluble vitamins. Vitamin Deficiency.	4	5	8
5.	**10.11.2023**	Chemical Structure and Functions of Water-soluble vitamins. Vitamin Deficiency.	4	5	8
6.	**24.11.2023**	Biochemical bases of reception. Mechanisms of signal transmission inside the cell. General characteristics and classification of hormones and neurotransmitters.	4	5	8
7.	**08.12.2023**	Mechanisms of action of hormones. Endocrine dysfunction and their pharmacocorrection.	4	5	8
8.	**22.12.2023**	Metabolic Detoxification Pathways. Liver importance in xenobiotics metabolism.	4	5	8
9.	**19.01.2024**	*Final test of CM 4 assimilation*	4	11	20
		Semester credit of the Module 2 «Metabolism and its regulation».			
		Total from CM 4		36	60
		THE WHOLE NUMBER OF HOURS FOR THE MODULE 2:	**36**	**60**	**100**

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CALENDAR-THEMATIC PLAN OF PRACTICAL LESSONS
Biological Chemistry 3-d course of study full-time form of education
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(Language of instructions – English)
Фм21англ-03, autumn semester, 2023-2024 a.y.

No	Date	Lesson Name	Volume in hours	Knowledge Assessment System, points	
				min	max
CONTENT MODULE 3. FUNDAMENTALS OF MOLECULAR BIOLOGY					
1.	**04.09.2023**	Conjugated proteins metabolism. Metabolism of Hemoproteins.	4	5	7
2.	**18.09.2023**	Conjugated proteins metabolism. Metabolism of nucleotides and nucleic acids.	4	5	7
3.	**02.10.2023**	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		24	40
CONTENT MODULE 4. INDIVIDUAL METABOLIC PROCESSES					
4.	**16.10.2023**	Vitamins. Nomenclature and Classification of Vitamins. Chemical Structure and Functions of Fat-soluble vitamins. Vitamin Deficiency.	4	5	8
5.	**30.10.2023**	Chemical Structure and Functions of Water-soluble vitamins. Vitamin Deficiency.	4	5	8
6.	**13.11.2023**	Biochemical bases of reception. Mechanisms of signal transmission inside the cell. General characteristics and classification of hormones and neurotransmitters.	4	5	8
7.	**27.11.2023**	Mechanisms of action of hormones. Endocrine dysfunction and their pharmacocorrection.	4	5	8
8.	**11.12.2023**	Metabolic Detoxification Pathways. Liver importance in xenobiotics metabolism.	4	5	8
9.	**08.01.2024**	*Final test of CM 4 assimilation*	4	11	20
		Semester credit of the Module 2 «Metabolism and its regulation».			
		Total from CM 4		36	60
THE WHOLE NUMBER OF HOURS FOR THE MODULE 2:			**36**	**60**	**100**

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CALENDAR-THEMATIC PLAN OF PRACTICAL LESSONS
Biological Chemistry 3-d course of study full-time form of education
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(Language of instructions – English)
Фм21англ-04 autumn semester, 2023-2024 a.y.

No	Date	Lesson Name	Volume in hours	Knowledge Assessment System, points	
				min	max
CONTENT MODULE 3. FUNDAMENTALS OF MOLECULAR BIOLOGY					
1.	**11.09.2023**	Conjugated proteins metabolism. Metabolism of Hemoproteins.	4	5	7
2.	**25.09.2023**	Conjugated proteins metabolism. Metabolism of nucleotides and nucleic acids.	4	5	7
3.	**09.10.2023**	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		24	40
CONTENT MODULE 4. INDIVIDUAL METABOLIC PROCESSES					
4.	**23.10.2023**	Vitamins. Nomenclature and Classification of Vitamins. Chemical Structure and Functions of Fat-soluble vitamins. Vitamin Deficiency.	4	5	8
5.	**06.11.2023**	Chemical Structure and Functions of Water-soluble vitamins. Vitamin Deficiency.	4	5	8
6.	**20.11.2023**	Biochemical bases of reception. Mechanisms of signal transmission inside the cell. General characteristics and classification of hormones and neurotransmitters.	4	5	8
7.	**04.12.2023**	Mechanisms of action of hormones. Endocrine dysfunction and their pharmacocorrection.	4	5	8
8.	**18.12.2023**	Metabolic Detoxification Pathways. Liver importance in xenobiotics metabolism.	4	5	8
9.	**15.01.2024**	*Final test of CM 4 assimilation* ***Semester credit of the Module 2*** «Metabolism and its regulation».	4	11	20
		Total from CM 4		36	60
		THE WHOLE NUMBER OF HOURS FOR THE MODULE 2:	**36**	**60**	**100**

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(Language of instructions – English)
Фм21англ-05 autumn semester, 2023-2024 a.y.

No	Date	Lesson Name	Volume in hours	Knowledge Assessment System, points	
				min	max
CONTENT MODULE 3. FUNDAMENTALS OF MOLECULAR BIOLOGY					
1.	**05.09.2023**	Conjugated proteins metabolism. Metabolism of Hemoproteins.	4	5	7
2.	**19.09.2023**	Conjugated proteins metabolism. Metabolism of nucleotides and nucleic acids.	4	5	7
3.	**03.10.2023**	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		24	40
CONTENT MODULE 4. INDIVIDUAL METABOLIC PROCESSES					
4.	**17.10.2023**	Vitamins. Nomenclature and Classification of Vitamins. Chemical Structure and Functions of Fat-soluble vitamins. Vitamin Deficiency.	4	5	8
5.	**31.10.2023**	Chemical Structure and Functions of Water-soluble vitamins. Vitamin Deficiency.	4	5	8
6.	**14.11.2023**	Biochemical bases of reception. Mechanisms of signal transmission inside the cell. General characteristics and classification of hormones and neurotransmitters.	4	5	8
7.	**28.11.2023**	Mechanisms of action of hormones. Endocrine dysfunction and their pharmacocorrection.	4	5	8
8.	**12.12.2023**	Metabolic Detoxification Pathways. Liver importance in xenobiotics metabolism.	4	5	8
9.	**09.01.2024**	*Final test of CM 4 assimilation* ***Semester credit of the Module 2*** «Metabolism and its regulation».	4	11	20
		Total from CM 4		36	60
		THE WHOLE NUMBER OF HOURS FOR THE MODULE 2:	**36**	**60**	**100**

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Фм21англ-06, autumn semester, 2023-2024 a.y.

No	Date	Lesson Name	Volume in hours	Knowledge Assessment System, points	
				min	max
CONTENT MODULE 3. FUNDAMENTALS OF MOLECULAR BIOLOGY					
1.	**12.09.2023**	Conjugated proteins metabolism. Metabolism of Hemoproteins.	4	5	7
2.	**26.09.2023**	Conjugated proteins metabolism. Metabolism of nucleotides and nucleic acids.	4	5	7
3.	**10.10.2023**	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		20	40
CONTENT MODULE 4. INDIVIDUAL METABOLIC PROCESSES					
4.	**24.10.2023**	Vitamins. Nomenclature and Classification of Vitamins. Chemical Structure and Functions of Fat-soluble vitamins. Vitamin Deficiency.	4	5	8
5.	**07.11.2023**	Chemical Structure and Functions of Water-soluble vitamins. Vitamin Deficiency.	4	5	8
6.	**21.11.2023**	Biochemical bases of reception. Mechanisms of signal transmission inside the cell. General characteristics and classification of hormones and neurotransmitters.	4	5	8
7.	**05.12.2023**	Mechanisms of action of hormones. Endocrine dysfunction and their pharmacocorrection.	4	5	8
9.	**19.12.2023**	Metabolic Detoxification Pathways. Liver importance in xenobiotics metabolism.	4	5	8
8.	**16.01.2024**	*Final test of CM 4 assimilation*	4	11	20
		Semester credit of the Module 2 «Metabolism and its regulation».			
		Total from CM 4		36	60
		THE WHOLE NUMBER OF HOURS FOR THE MODULE 2:	**36**	**60**	**100**

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Фм21англ-07 autumn semester, 2023-2024 a.y.

No	Date	Lesson Name	Volume in hours	Knowledge Assessment System, points	
				min	max
CONTENT MODULE 3. FUNDAMENTALS OF MOLECULAR BIOLOGY					
1.	**06.09.2023**	Conjugated proteins metabolism. Metabolism of Hemoproteins.	4	5	7
2.	**20.09.2023**	Conjugated proteins metabolism. Metabolism of nucleotides and nucleic acids.	4	5	7
3.	**04.10.2023**	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	24	40
CONTENT MODULE 4. INDIVIDUAL METABOLIC PROCESSES					
4.	**18.10.2023**	Vitamins. Nomenclature and Classification of Vitamins. Chemical Structure and Functions of Fat-soluble vitamins. Vitamin Deficiency.	4	5	8
5.	**01.11.2023**	Chemical Structure and Functions of Water-soluble vitamins. Vitamin Deficiency.	4	5	8
6.	**15.11.2023**	Biochemical bases of reception. Mechanisms of signal transmission inside the cell. General characteristics and classification of hormones and neurotransmitters.	4	5	8
7.	**29.11.2023**	Mechanisms of action of hormones. Endocrine dysfunction and their pharmacocorrection.	4	5	8
8.	**13.12.2023**	Metabolic Detoxification Pathways. Liver importance in xenobiotics metabolism.	4	5	8
9.	**10.01.2024**	*Final test of CM 4 assimilation* ***Semester credit of the Module 2*** «Metabolism and its regulation».	4	11	20
			Total from CM 4	36	60
		THE WHOLE NUMBER OF HOURS FOR THE MODULE 2:	**36**	**60**	**100**

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