Educational Institution "BELARUSIAN STATE MEDICAL UNIVERSITY"

Approved by Rector of the Belarusian State Medical University Sergej Rubnikovich -007/ep/mf/C

— Theoretical training

References:

Curriculum

Specialty 1-79 01 08 Pharmacy **Medical Faculty for International Students** Type of training - on-site training

Qualification -Pharmacist Контрольный Training period - 5 years экземпляр

II Time schodule (in weeks)

I. Schedule of the educational process	11. 1	lime sche	edule (in we	eeks)
September October November December January February March April May June July Augus Augus	etical trainii	Examinations Practical sessions	Work experience practical training Final academic assessment	Vacations Total
	= 37	3 2		10 52
	= 37	4		11 52
	= 34	6 1	2	9 52
N 0	= 33	3 4 2	2	11 52
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	159	19 5	22 3	43 251

: — Examination

0 — Practical session

= — Vacations X — Work experience practical training // — Final academic assessment

				Nur	nber	of ac	aden	ic ho	urs										Dis	tribu	tion	by y	ears	and	sem	este	ers										dits	d)
			10				Incl	uding					ear						ear						ear						year				/ yea		credits	opo
	Title of the course	Su	esta	2	SILS			gr.			ester: week			nester 8 week			ester wee			nester 8 wee			ester week			ester weel			nester 7 wee			nester 3 wee			nester 3 weel		of	cy o
Nº	units, unit, disciplines, corse works (projects)	Exams	Credit tests	Total hours	Class hours	Lectures	Laboratory practicals	Skills building sessions	Workshops	Total hours	Class hours	Credits	Total hours	Class hours	Credits	Total hours	Class hours	Credits	Total hours	Class hours		Total hours	Class hours	Credits	Total hours	Class hours	Credits	Total hours	Class hours	Credits	Total hours	Class hours		S	Class hours		Total number	Competency code
1	State Component			5314	3138	498	1713	873	54	1000	613	27	825	512	2 23	892	51	5 25	904	518	3 26	448	240	12	385	221	1 11	340	202	9	315	190	0 9	205	127	6	148	
1.1	Module of Social and Humanitarian Disciplines																																					
1.1.1	History of Belarusian Statehood		1	108	54	26			28	108	54	3																									3	UC-9
1.1.2	Philosophy		4						26		01								108	3 54	1 3																3	UC-8
1.2	Linguistic Module			100	-																																	
1.2.1	Pharmaceutical												1		1								1	3		x+253												
	Latin		1,2d	213	126			126		118	72	3	95	54	. 3																						6	UC-11
1.2.2	Russian Language as Foreigh Language		1,2d, 3,4d, 6d	942	650			650		240	180	6	180	136	5	252	162	7	180	108	3 5	45	32		45	32	2 2										25	UC-3
1.3	Module "Information Technologies in		00	012	000			000		2.10	100		100	100																								
	Pharmacy"														7 4																							
1.3.1	Biomedical Statistics		2	90	40	12		28					90	40	3																						3	UC-1, BPC-1
1.3.2	Informatics in Pharmacy		1	95	52	4		48		95	52	3																									3	UC-2
1.4	Natural Science Module																																					BPC-2
	Biology	1		95	52	24	28	3		95	52	3																									3	
1.4.2	Biomedical Physics	2	1	222	130	28	81	21		112	65	3	110	65	3																						6	
1.4.3	Pharmaceutical Botany	3	2	230	141	30	111						120	81	3	110	60) 3																			6	
1.5	Chemical Module																																					BPC-2
1.5.1	General and Inorganic Chemistry	2	1	232	138	30	108			112	66	3	120	72	3																						6	
1.5.2	Physical and Colloid Chemistry	4	3	220	127	16	111									110	63	3 3	110	64	1 3																6	
1.5.3	Analytical Chemistry	4	3	408	225	40	185									210	115	5 6	198	3 110) 6																12	
1.5.4	Organic Chemistry	4	3	408	215	30	185									210	115	5 6	198	3 100) 6																12	
1.6	Human Physiology Module																																					BPC-3
1.6.1	Human Anatomy and Physiology	2	1	230	136	28	108	3		120	72	3	110	64	. 3																						6	
1.6.2	Biological			000	100		10-												440	000	,	0.5															0	
1.6.3	Chemistry Pathologic	5					105												110	82	2 3	95	57	3	140	00		440	000								6	
1.7	Physiology Pharmacology and	7	6	220	126	24	102																		110	63	3	110	63	3 3							6	BPC-4,
1.7.1	Pharmacotherapy Module		F 0	000	477	0.4	450															110	59	2	110	EC	2	110	EC	9 3							9	5
1.7.1	Pharmacology Clinical	7	5, 6	330	177	24	153							,								110	25	3	110	38	3	110	55	3							9	
	Pharmacology, Pharmacotherapy	9	8	220	130	28	102																								110) 70) 3	110	60) 3	6	

Continuation of the Curriculum for the specialty 1-79 01 08 Pharmacy (MFIS). Registration № L 79-1-007/ep/mf/2022 Distribution by years and semesters Number of academic hours Total number of credits Competency code V year Including I year II year III year IV year Credit tests semester #7, semester#1. semester #2, semester #3, semester #4, semester #5, semester #6, semester #8, Title of the course Class hours Total hours 18 weeks 18 weeks 19 weeks 18 weeks 17 weeks Laboratory practicals Skills building sessions Workshops Nº units, unit, disciplines, Class hours Total hours Class hours Class hours Class hours Class hours Total hours Class hours Total hours Class hours Total hours Class hours Total hours Total hours Class hours Total hours Total hours Total hours corse works (projects) Credits Credits Credits Credits Credits Organization and **Economics of Pharmacy** Organization and UC-5, 6 BPC-Economics of 6, 8 5, 7 533 299 92 6 120 67 3 120 80 3 95 60 15 6-11 Pharmacy 64 235 198 Pharmaceutical BPC-7. 95 67 Merchandizing 9 205 127 28 110 60 3 3 6 12 8 Component of Higher Educational 3773 | 1949 | 464 | 1205 | 256 | 24 | 90 | 36 | 3 | 110 | 61 | 3 | 180 | 88 | 6 | 110 | 64 | 3 | 593 | 345 | 18 | 606 | 308 | 16 | 616 | 325 | 18 | 635 | 288 | 19 | 833 | 434 | 27 | 113 Institutions Introduction to the Specialty Module History of Pharmacy SC-1 90 36 12 24 90 36 2.1.2 Psychology of UC-4-6, Interpersonal Relationships 3 90 40 20 20 90 40 3 Communication Module 2.2.1 Biopharmaceutical Ethics and SC-2 200 109 Communication 89 110 61 3 90 48 2.2.2 Psychology of Professional Communication 90 40 10 30 40 3 3 SC-2 Management of Pharmacy 90 46 3 SC-4 46 4 3 Microbiology, Virology, **Immunology** Module 2.3.1 Microbiology, Virology, Immunology 200 104 16 88 110 64 3 90 40 SC-5 6 **Pharmaceutical** Hygiene and **Ecology Module** 2.4.1 Pharmaceutical Hygiene 40 6 34 90 40 SC-6 2.4.2 Pharmaceutical **Ecology** 90 46 3 SC-7 90 46 16 30 **First Aid Module** 2.5.1 90 40 6 34 90 40 3 SC-8 First Aid Disaster Medicine BPC-11 7,8d 200 107 24 83 110 63 3 90 44 6 SC-8,9 Pharmaceutical **Technology** Module Pharmacy Technology of 198 98 6 120 318 172 36 136 74 SC-10 Drugs Pharmaceutical Biotechnology 6 120 73 22 51 120 73 SC-11 Industrial Technology of Drugs 335 180 48 132 170 94 5 165 86 5 10 SC-11 2.7 Module "Management and economics of pharmaceutical enterprises" Management and Economics of Pharmaceutical Enterprises 90 46 10 36 90 46 3 3 SC-12 2.8 Pharmaceutical **Care Module** Pharmaceutical Care 90 46 10 36 46 3 90 SC-13 Continuation of the Curriculum for the specialty 1-79 01 08 Pharmacy (MFIS). Registration № L 79-1-007/ep/mf/2022

				Nun	nber	of ac	adem	ic ho	urs										Dist	ributi	ion l	by ye	ars a	nd s	eme	esters	s										lits	
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№ units, unit, disciplin carse works (project		Exar	Credit tests	Total hours	Class hours	Lectures	Laborator, practicals	Skills building sessions	Workshops	Total hours	Class hours	Credits	Total hours	Class hours	Credits	Total hours	Class hours	Credits	Total hours	Class hours	Credits	Total hours	တ္	_	_	S.	Credits	Total hours	Class hours	Credits	Total hours	Class hours	Credits	Total hours	Class hours	Credits	Total number of	Competency code
	Pharmaceutical Chemistry and Pharmacognosy Module				68																																	
	Pharmacognosy	6	5	330	184	32	152															120	96	3 2	10	88	6										9	SC-14,15
	Pharmaceutical	6.0	F 7	E22	222	00	224															95	71	3 1	20	73	2	120	88	3	198	90	6				15	SC-14, 16,17
	Chemistry Toxicological	6,8	5,7	533	322	00	234															90	/ 1	3 1	20	13	3	120	00	3	130	30	0				13	10,17
	Chemistry	9	8	205	136	34	102																								110	68	3	95	68	3	6	SC-18
2.10	Drug Development and Standardization Module		0																																			
	Pharmaceutical Development with the Fundamentals of Biopharmaceutics		9	90	48	12	36																											90	48	3	3	SC- 19,20
	Modern Methods of Analysis and Standardization of Drugs		9				13103																											198	94			SC- 21,22
2.11	Research Module																																					UC-1
	Course work on the discipline "Pharmacognosy"			36														5.							36		1										1	
	Course work on the discipline "Pharmaceutical Chemistry"			36																								36		1							1	
	Course work on the discipline "Crganization and Economics of Pharmacy"			36																		3									36		1				1	
2.11.4	Course work on the discipline "Industrial Technology of Drugs"			36																											36		1				1	
2.12	Elective Module ¹																																					
	Phytotherapy / Chromatographic Methods of Analysis		7	90	40	16	24					P 1																90	40	3							3	BPC-7, SC-14, 17, 22
	Additional Courses																																					
	Physical Education			/280	/280			/280		/36	/36		/36	/36		/38	/38		/36	/36		/34	/34	1	34	/34		/34	/34		/32	/32						UC-15
	nt of session training			9087			2912	1129	100	11.0		77								Winds.	29	1041					27	956	527	27	950	478	28	1038	561	33	261	
Amou	nt of session training per week			3007	3007	302	2310	1123	10	1000	34	30	s 18	32			32	31		32			34			31			31			30			31			
	nt of corse works	4									UT			UZ			UL			UL			J 1			1			1			2			01			
	nt of exams	24									1			3			2			3			2			5			2			3			3			
	nt of credits		48								8			5			5						6		_	3			6			4			7			

IV. Pract	tical sessi	ons		V. Work experince	practical tra	ining		VI. Final academic assessment
Name of practical sessions	Semester	Week	Credits	Name of practical sessions	Semester	Week	Credits	
1. Pharmaceutical				1. Pharmacy Technological Practice	6	2	3	
Propaedeutic Practice	1	1	2	2. Analytical Laboratory Practice	8	2	3	Integrated state examination in
2. Botanical Practice	2	1	2	3. Pharmacological Practice	10	4	6	pharmacy and (or) defense of the
3. Pharmacognostic Practice	6, 7	2	3	4. Organizational and Managerial			1000	thesis
				Practice	10	12	18	
4. Medical Practice	7	1	1	5. Industrial Technological Practice	10	2	3	

VII. Competence matrix

Competency code	Title of the Competency	Module code, discipline code
UC-1	Master the basics of research, be able to search, analyze and synthesize information in medicine and biology	1.3.1, 2.11
UC-2	Solve standard tasks of professional activity based on the use of information and communication technologies	1.3.2
UC-3	Be able to communicate in the foreign language to solve problems of interpersonal and professional interaction	1.2.2
UC-4	Be able to work in a team and be tolerant of social, ethnic, religious, cultural and other differences	2.1.2
UC-5	Be capable of self-development and self-improvement in professional activities	1.8.1, 2.1.2
UC-6	Take initiative and adapt to changes in professional activities	1.8.1, 2.1.2
UC-8	Possess modern culture of thinking, humanistic worldview, analytical, innovative and critical style of cognitive, social, practical and communicative activity; use the fundamentals of philosophy knowledge in direct professional activity; independently master philosophy knowledge and build an individual worldview position on its basis	1.1.2

Competency code	Title of the Competency	Module code, discipline code
UC-9	Have the ability to analyze the processes of state building in different historical periods, identify the factors and mechanisms of historical changes, determine the socio-political significance of historical events (personalities, artifacts and symbols) for modern Belarusian statehood, perfectly use the identified patterns in the process of forming civil identity	1.1.1
UC-11	Use the Latin language as a tool for professional activity	1.2.1
UC-15	Possess health-preserving skills	3.1
UC-17	Use psychological patterns and technologies in various forms of interpersonal interaction in the implementation of professional activities	2.1.2
BPC-1	Use basic mathematical and statistical methods for processing data obtained during the development and quality control of medicines	1.3.1
BPC-2	Apply knowledge of the basic physical, chemical and biological laws for quality control of medicines and medicinal plant raw materials	1.4, 1.5
BPC-3	Define symptoms that require immediate medical attention or allow the use of over-the-counter medications	1.6
BPC-4	Replace the missing drug with analogues, taking into account the dose, dosage form and contraindications to the administration	1.7
BPC-5	Provide pharmaceutical information to nealth care professionals, to provide rational pharmaceutical assistance and advice in the sale of medicines, including the main and side effects and ways to correct them, features of joint use and interaction, rules for storage and disposal at home	1.7
BPC-6	Organize the work of the pharmacy and provide patients with medicines in hospital	1.8.1
BPC-7	Carry out professional activity, including the release and sale of medicines, medical products and pharmacy assortment goods through pharmacies, within the framework of the regulatory legal control system of the medicines circulation sphere	1.8.1, 1.8.2, 2.12
BPC-8	Maintain the necessary document circulation at pharmacy organizations	1.8.1
BPC-9	Carry out inspections of pharmacy organizations and pharmaceutical enterprises	1.8.1
BPC-10	Perform pharmacovigilance functions	1.8.1
BPC-11	Plan and organize resource support for pharmacy organizations and pharmaceutical enterprises, including emergency situations	1.8.1, 2.5.2
BPC-12	Carry out marketing research of the pharmaceutical market	1.8.2
SC-1	Take into account development trends, to solve current problems and potential directions in pharmacy for the organization and management of pharmacy organizations and pharmaceutical enterprises	2.1.1
SC-2	Carry out professional activities in accordance with ethical norms and moral principles of pharmaceutical ethics and deontology, develop a team strategy to achieve the set goal, establish and maintain psychological contact	2.2.1, 2.2.2
SC-4	Organize and control the labor activity of pharmaceutical organization employees, show initiative, leadership and responsibility, make managerial decisions	2.2.3
SC-5	Possess methods for assessing the microbial contamination of medicines and monitoring the correctness of their storage	2.3.1
SC-6	Perform work on the certification of workplaces and the prevention of occupational diseases	2.4.1
SC-7	Collect and utilize medical waste, advise the population on the disposal of medicines	2.4.2
SC-8	Provide first aid in case of medical emergency	2.5.1, 2.5.2
SC-9	Use methods of protection against possible consequences of emergency situations	2.5.2
SC-10	Make medicines at the pharmacy	2.6.1
SC-11	Take part in the industrial production of medicines, including biological (as well as immunobiological) medicines	2.6.2, 2.6.3
SC-12	Organize the work of structural divisions of pharmaceutical enterprises	2.7.1
SC-13 SC-14	Carry out pharmaceutical consulting or the use of medicines, medical products and pharmacy assortment goods Choose and use appropriate methods and technologies when conducting quality control of medicines and medicinal plant	2.8.1
	raw materials, evaluate the obtained results	2.9.1, 2.9.2, 2.12
SC-15	Organize the cultivation of medicinal plants and to carry out the preparation of medicinal plant raw materials	2.9.1
SC-16	Prognosticate the physicochemical properties, quality control methods and pharmacological properties of medicinal substances based on its structure.	2.9.2
SC-17	Evaluate the stability of medicines during their storage	2.9.2, 2.12.1
SC-18	Use a complex of physicochemical, biological and chemical methods when conducting research of biological objects for the presence of toxic substances	2.9.3
SC-19	Participate in the development of original and generic medicines, the formation of a new drug application for them	2.10.1
SC-20	Identify factors affecting bioavailability, to conduct the analytical stage of bioequivalent studies	2.10.1
SC-21	Carry out all types of work related to the organization and functioning of the quality assurance system of medicines at the pharmacy, pharmacy warehouse, testing laboratory and at a pharmaceutical enterprise	2.10.2
SC-22	Develop and validate methods for the analysis of medicines and medicinal plant raw materials	2.10.2, 2.12.1

Head of Education Department

_ Natallia Fomchenko

Developed on the basis of the standard Curricilum for the specialty 1-79 01 08 Pharmacy. Registration № L 79-1-007/ep/mf

¹ The list of electives are approved by the Order of Higher Educational Institution.

First Vice-Rector

_ Irina Moroz

Dean of the Medical Equity for International Students
Oleg Ishutin

2022

Recommended for approval by the University Council. Protocol № 5 dated 17.05.2022