





№	Title of the course units, unit, disciplines, course works (projects)	Exams	Credit tests	Number of academic hours					Distribution by years and semesters																		Competency code																	
				Total hours	Class hours	Including				I year			II year			III year			IV year			V year																						
						Lectures	Laboratory practicals	Skills building sessions	Workshops	semester #1, 19 weeks			semester #2, 18 weeks			semester #3, 19 weeks			semester #4, 18 weeks			semester #5, 17 weeks			semester #6, 17 weeks			semester #7, 17 weeks			semester #8, 16 weeks			semester #9, 18 weeks										
										Total hours	Class hours	Credits	Total hours	Class hours	Credits	Total hours	Class hours	Credits	Total hours	Class hours	Credits	Total hours	Class hours	Credits	Total hours	Class hours		Credits	Total hours	Class hours	Credits													
2.10	<b>Drug Development and Standardization Module</b>																																											
2.10.1	Pharmaceutical Development with the Fundamentals of		9	90	59	8	51																														90	59	3	SC-20,21				
2.10.2	Modern Methods of Analysis and Standardization of Drugs		9	144	80	12	68																																	EPC-7, SC-22,23				
2.11	<b>Research Module</b>																																							UC-1, SC-26				
2.11.1	Course work on the discipline "Pharmacognosy"			36																																								
2.11.2	Course work on the discipline "Pharmacy Technology of Drugs"			36																																								
2.11.3	Course work on the discipline "Pharmacology"			36																																								
2.11.4	Course work on the discipline "Pharmaceutical Chemistry"			36																																								
2.11.5	Course work on the discipline "Industrial Technology of Drugs"			36																																								
2.11.6	Course work on the discipline "Organization and Economics of Pharmacy"			36																																								
2.12	<b>Elective Module</b>																																											
2.12.1	Chromatographic Methods of Analysis		3	90	40	16	24							90	40	3																											SC-24	
2.12.2	Phytotherapy <sup>1</sup>		7	90	40	16	24																																				SC-25	
2.13	<b>Additional Courses</b>																																											
2.13.1	Physical Education			/202	/202		/202		/34	/34	/34	/34	/36	/36	/34	/34	/32	/32	/32	/32																							UC-18	
2.13.2	Additional Courses <sup>1</sup>			/1-4																																							UC-9,11, 12, 13,14	
2.14	<b>Additional types of training</b>																																											
2.14.1	Fundamentals of information technology <sup>2</sup>			/8д	/72	/50	/26	/24																																				UC-2
2.14.2	Philosophy and methodology of science <sup>2</sup>		/7	/124	/72	/40	/32																																				UC-1	
2.14.3	Foreign language <sup>2</sup>		/9	/142	/96	/96																																					UC-3	
Amount of session training hours					9231	5061	870	2992	1121	78	1067	631	29	1010	587	29	1135	633	33	996	544	29	1035	591	30	1027	547	28	946	521	27	939	456	27	1076	551	33							
Amount of session training hours per week												35		33										35		32																		
Amount of course works																																												
Amount of exams																																												
Amount of credits					48																																							

## IV. Practical sessions

## V. Work experience practical training

## VI. Final academic assessment

Name of practical sessions	Semester	Week	Credits	Name of practical sessions	Semester	Week	Credits	Integrated state examination in pharmacy and (or) defense of the thesis
1. Pharmaceutical Propaedeutic Practice	1	1	1	1. Pharmacy Technological Practice	6	2	3	
				2. Industrial Technological Practice	8	2	3	
2. Botanical Practice	2	1	1	3. Pharmacological Practice	10	4	6	
3. Pharmacognostic Practice	6, 7	2	3	4. Organizational and Managerial Practice	10	12	18	
4. Medical Practice	7	1	1	2. Analytical Laboratory Practice	10	2	3	

VII. Competence matrix		
Competency code	Name of competence	Module code, discipline code
UC-1	Apply methods of scientific cognition in research, generate and implement innovative ideas	1.3.1, 2.11, 2.14.2
UC-2	Solve professional, scientific and innovative tasks based on the use of information and communication technologies	1.3.2, 2.14.1
UC-3	Carry out communications in a foreign language in an academic, scientific and professional environment for the implementation of research and innovative activities	1.2.2, 2.14.3
UC-4	Provide communications, demonstrate leadership skills, be capable of team organization and development of strategic goals and objectives, be tolerant to social, ethnic, religious, cultural and other differences	1.8.2, 2.1.2
UC-5	Be capable of self-development and improvement in professional activity, develop innovative competence and ability to innovative activity	1.8.1, 2.1.2
UC-6	Take the initiative and adapt to changes in professional activity, be able to predict the conditions for the implementation of professional activity and solve professional tasks in conditions of uncertainty	1.8.1, 2.1.2
UC-7	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 established patterns in the process of forming civic identity	1.1.1
UC-8	Possess modern culture of thinking, a humanistic worldview, an analytical, innovative and critical style of cognitive, socio-practical and communicative activity, use the fundamentals of philosophical knowledge in direct professional activity, independently assimilate philosophical knowledge and build a personal worldview position on this basis	1.1.2
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 established patterns in the process of forming civic identity	1.1.3
UC-10	Use the Latin language as a tool for professional activity	1.2.1
UC-11	Have the ability to develop and implement methods and technologies of self-organization and self-education, design the trajectories of personal professional growth and development, consciously carry out pedagogical work with children in a family environment in different types of activities	2.1.2, 2.13.2
UC-12	Analyze and evaluate the impact of socio-economic factors on the state of public health and the organization of medical and pharmaceutical care in order to develop additional socio-psychological measures to prevent, preserve and promote the health and working capacity of the population	2.13.2
UC-13	Possess the ability to formulate personal ideological principles based on the feat of the Belarusian people and the historical lessons of the Great Patriotic War, preserve and multiply the historical memory of the role of the Soviet Union and its peoples in the Victory over German Nazism, pass to new generations the historical truth and norms of behavior, values and traditions developed by the Belarusian people during the period of overcoming the tragic events of the Great Patriotic War	2.13.2
UC-14	Have the ability to competently use the fundamentals of legal knowledge in various spheres of life, possess the skills of searching for normative legal acts, analyzing their content and applying them in professional activity	2.13.2
UC-15	Take into account development trends, solve current problems and potential directions in pharmacy for the organization and management of pharmacy organizations and pharmaceutical enterprises	2.1.1
UC-16	Use psychological patterns and technologies in various forms of interpersonal interaction in the implementation of professional activities	2.1.2
UC-18	Use the means of physical culture and sports to preserve and promote health, prevent diseases	2.13.1
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	Identify the symptoms and syndromes that require an ambulance call or immediate medical attention or that allow for 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	1.7.1
BPC-5	Provide pharmaceutical advice and counselling of medical workers and the public, including the pharmacological action and adverse reactions of medicines and methods of their correction, specific features of their joint use and interaction, rules of usage, storage and disposal at home	1.7.1
BPC-6	Carry out professional activities, including dispensing and selling medicines, medical devices and other pharmacy products through pharmacies in accordance with the legislation of the Republic of Belarus	1.8.1, 1.8.2
BPC-7	Keep the document flow included in the duties of a specialist in pharmacy organizations	1.8.1
BPC-8	Use in professional activity methods of carrying out commodity expertise of medicines, medical products and other goods of the pharmacy assortment	1.8.2
EPC-1	Choose proper over-the-counter medicines, taking into account the information provided by pharmacy visitors about the symptoms of the disease and the medications used	1.7.2, 2.8
EPC-2	Organize the work of the pharmacy and provide patients with medicines under in-patient conditions	1.8.1
EPC-3	Carry out pharmaceutical inspection and audit of pharmacy organizations and pharmaceutical enterprises	1.8.1
EPC-4	Perform pharmacovigilance functions	1.8.1
EPC-5	Plan and organize resource support for pharmacy organizations and pharmaceutical enterprises, including emergency situations	1.8.1, 2.5.2
EPC-6	Perform marketing research of the pharmaceutical market, develop the strategy and tactics for promoting products in the pharmaceutical market	1.8.2
EPC-7	Take measures to ensure the pharmaceutical quality system of medicines and other pharmacy products	1.8.1, 2.10.2
SC-1	Carry out professional activities in accordance with ethical norms and moral principles of pharmaceutical ethics and deontology	2.2.1, 2.2.2
SK-2	Develop a team strategy to achieve the goal, carry out negotiations and interaction with employees of other organizations	2.2.2, 2.2.3
SK-3	Organize and control the labor activity of employees of a pharmaceutical organization, show initiative, leadership and responsibility, make managerial decisions	2.2.3
SK-4	Use the methods for assessing microbial contamination of medicines, monitoring their sterility and appropriate storage	2.3
SK-5	Ensure compliance with sanitary and hygienic standards, labor protection, fire safety, environmental protection, emergency procedures	2.4.1, 2.5.2
SK-6	Perform work on certification of workplaces and prevention of occupational diseases in pharmacy organizations and pharmaceutical enterprises	2.4.1

Competency code	Name of competence	Module code, discipline code
SK-7	Collect, neutralize and dispose of medical and pharmaceutical waste, counsel the population on the disposal of medicines	2.4.2
SK-8	Provide first aid in case of medical emergency	2.5.1, 2.5.2
SK-9	Use methods of protection against possible consequences of emergency situations	2.5.2
SK-10	Make medicines at the pharmacy	2.6.1
SK-11	Take part in the industrial production of medicines and biologically active food additives	2.6.2, 2.6.3
SK-12	Organize the work of structural divisions of pharmaceutical enterprises, participate in their modernization	2.7
SK-13	Monitor the quality management system at the pharmaceutical enterprise, draw up a plan of corrective measures	2.7
SK-14	Comply with the concept of rational use of medicines and form a pharmaceutical dossier during pharmaceutical counselling of the population on the use of medicines, medical products and pharmacy assortment goods	2.8
SK-15	Develop skills of a healthy lifestyle and prevention of diseases in the population	2.8
SK-16	Choose and use appropriate methods and technologies when conducting quality control of medicines and medicinal plant raw materials, evaluate the obtained results	2.9.1, 2.9.2
SK-17	Use methods of cultivating medicinal plants, procure medicinal plant raw materials of wild and cultivated medicinal plants	2.9.1
SK-18	Prognosticate the physicochemical properties, quality control methods and pharmacological properties of medicinal substances based on its structure.	2.9.2
SK-19	Use a complex of physicochemical, biological and chemical methods when conducting research of biological objects for the presence of toxic substances	2.9.3
SK-20	Participate in the development of original and generic medicines, the formation of a new drug application for them	2.10.1
SK-21	Identify factors affecting bioavailability, to conduct the analytical stage of bioequivalent studies	2.10.1
SK-22	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
SK-23	Analyze quality risks in industrial production, pharmacy manufacture, storage and sale of medicines, biologically active food additives	2.10.2
SK-24	Use chromatographic analysis methods to perform quality control of pharmaceutical substances, medicinal plant raw materials, medicines and biologically active food additives	2.12.1
SK-25	Choose and use appropriate methods and technologies when conducting quality control of medicines and medicinal plant raw materials, assess the results obtained	2.12.2
SK-26	Carry out search, critical analysis, generalization and systematization of scientific information, setting goals, research objectives and choice of optimal methods to achieve them	2.11

Developed on the basis of the standard Curriculum for the specialty 7-07-0912-01 Pharmacy. Registration № 7-07-09-007/np.

<sup>1</sup> The list of electives are approved by the Order of Higher Educational Institution.

<sup>2</sup> General educational disciplines "Philosophy and methodology of science", "Foreign language", "Fundamentals of information technology" are studied at the choice of the student

Abbreviations:

d - differentiated credit tests; UC - universal competence; BPC - basic professional competence; SC - specialized competence; EPC - extended professional competence

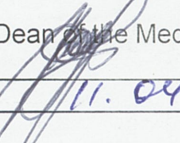
First Vice-Rector

  
Irina Moroz  
11.04.2023

Head of Education Department

  
Natallia Fomchenko  
11.04.2023

Dean of the Medical Faculty for International Students

  
Oleg Ishutin  
11.04.2023

It's recommended for approval by the University Council  
Protocol № 4 dated 11.04.2023