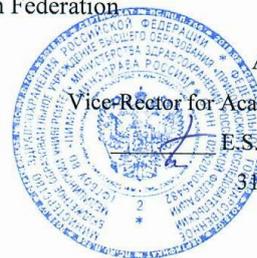


Federal State Budgetary Educational Institution of Higher Education  
"Privolzhsky Research Medical University"  
Ministry of Health of the Russian Federation



APPROVED

Vice-Rector for Academic Affairs

E.S. Bogomolova

31 August 2021

## WORKING PROGRAM

Name of the academic discipline: **MANAGEMENT AND ECONOMICS OF PHARMACY**

Specialty: **33.05.01 PHARMACY**

Qualification: **PHARMACIST**

Department: **MANAGEMENT AND ECONOMICS OF PHARMACY AND  
PHARMACEUTICAL TECHNOLOGY**

Mode of study: **FULL-TIME**

Labor intensity of the academic discipline: **612 academic hours**

Nizhny Novgorod  
2021

The working program has been developed in accordance with the Federal State Educational Standard for the specialty 33.05.01 PHARMACY, approved by Order by Order of the Ministry of Science and Higher Education of the Russian Federation No. 219 of March 27, 2018.

**Developers of the working program:**

Maxim Alekseevich Mishchenko, PhD in pharmaceutical sciences, associate professor of the Department of management and economics of pharmacy and pharmaceutical technology.

The program was reviewed and approved at the department meeting (protocol No. 9 of 29.04.2021).

Acting head of the Department,  
PhD in pharmaceutical sciences

29.04.2021

  
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(signature) I.V. Spitskaya

AGREED

Deputy Head of EMA ph.d. of biology  Lovtsova L.V.

29.04.2021

(signature)

## **1. The purpose and objectives of mastering the academic discipline MANAGEMENT AND ECONOMICS OF PHARMACY (hereinafter – the discipline):**

1.1. The purpose of mastering the discipline – participation in forming the following competencies:

- universal competencies (UC-2, UC-9);
- general professional competencies (GPC-3 (3.1-3.2), GPC-6 (6.1, 6.2, 6.4));
- professional competencies (PC-2 (2.1-2.6), PC-4 (4.4), PC-5 (5.1-5.7), PC-8 (8.1-8.5), PC-9 (9.1-9.3), PC-10 (10.1-10.2)).

1.2. Tasks of the discipline:

1. Formation of basic and fundamental pharmaceutical knowledge on specialty 33.05.01 Pharmacy.

2. Preparation of a specialist, which has analytical thinking, well oriented in control-permitting and organizational-management activities in the field of circulation of medicines, with in-depth knowledge of related disciplines.

3. Formation of skills in mastering the newest technologies and methods in the sphere of professional interests.

4. Acquisition of students' knowledge in the implementation of pharmaceutical organizations' activities and provision of pharmaceutical assistance to the population and medical and preventive institutions.

5. Formation of skills in the use of methods of organization and management of organizations involved in circulation of medicines.

6. Acquisition of skills in the implementation of activities related to the circulation of medicines and other pharmaceutical products in accordance with the requirements of existing laws and other legal and regulatory acts.

7. Formation of skills on the organization of transportation of pharmacy assortment products, based on the principles of transport logistics, and their subsequent storage in conditions of pharmaceutical organization taking into account the obligatory observance of conditions of storage and exclusion of unauthorized access.

8. Acquisition of skills on the organization of trade-purchasing activity with the purpose of maintenance of the maximum profitability and increase of competitiveness of the pharmaceutical organization at the expense of effective use of market mechanisms.

9. Acquisition of skills in organizing accounting for the movement of inventory and cash of pharmaceutical organization, preparation of accounting documentation and reporting according to the established forms.

10. Formation of skills on application of the basic methods, ways and means of reception, storage and processing of the information, observance of the basic requirements of information security.

1.3. Requirements to the deliverables of mastering the discipline

As a result of completing the discipline, the student should

### **Know:**

- the structure of the modern health care system of the Russian Federation
- basics of the legislation of the Russian Federation on health protection of citizens and ensuring sanitary-epidemiological welfare in the country
- basic regulatory and legal documents
- legal, legislative and administrative procedures and strategies relating to all aspects of pharmaceutical activities
- features of the pharmacist's work on concluding contracts with enterprises, institutions in accordance with the procedure established by law
- basics of the organization of pharmaceutical care (outpatient and inpatient) to different

groups of population

- basics of drug supply organization for outpatient and inpatient patients with medicines and other pharmaceutical products at full cost, as well as citizens eligible for social assistance
- basics of the organization of procurement of medical equipment for state and municipal needs
- the concept of consumer value, consumer properties of drugs and other pharmaceutical goods and the factors affecting them
- methods for analyzing the range of drugs and other pharmaceutical products
- requirements for labeling, packaging and storage of drugs and other pharmaceutical products
- basics of work team management
- maintenance of accounting records by pharmaceutical enterprises of wholesale and retail
- organization of work of average pharmaceutical and auxiliary personnel in pharmaceutical organizations
- basic principles of state regulation and the process of pricing of pharmaceutical products at all stages of the movement of goods
- rules of pharmaceutical expertise of prescriptions and requirements of medical and other organizations
- methods of preparing reports for internal and external users of accounting information
- methods of determining the needs and demand for different groups of drugs and other pharmaceuticals
- technology for storing drugs and other pharmaceuticals
- procedure for dispensing pharmaceuticals and other pharmaceutical goods from the pharmacy to the public, medical and other organizations
- organization of manufacturing of extemporaneous dosage forms on the basis of receipts and requirements of medical and other organizations
- main principles of accounting of inventory, cash and settlements
- principles and rules for settlements with personnel
- main forms of cashless payments for goods and services
- taxation system in pharmaceutical companies
- basics of record keeping in pharmaceutical organizations
- techniques for compiling external reporting of pharmaceutical organizations (accounting, statistical, tax)
- methods of financial analysis of the main indicators of pharmaceutical organizations activities
- principles of audit and management of business processes in pharmaceutical organizations
- principles of developing a business plan for pharmaceutical organizations
- methods of recruitment, placement and accounting of personnel movement
- legal basis for information and consulting assistance to visitors of pharmacy institutions in the choice of drugs and other pharmacy assortment products, as well as informing medical professionals about drugs, their synonyms and analogues, possible side effects and interactions
- legal basis for making a decision to replace the prescribed medication with synonyms or similar drugs in the prescribed manner on the basis of information about groups of drugs and synonyms within one international nonproprietary name and prices for them
- legal basis for the procedure of determining whether a medicinal product for medical use does not meet the established requirements or the data on the efficacy and safety of the medicinal product do not match the data on the medicinal product contained in the instructions for its use

- legal basis for the selection of optimal suppliers and procurement processes taking into account the previously conducted market research on medicinal products for veterinary use
- the legislative basis for the sale and dispensing of veterinary drugs to individuals and veterinary clinics by following the proper dispensing procedure
- the legal bases of the preparation for sale of veterinary drugs, carrying out their deposition in the sales area and in showcases of veterinary pharmacies and veterinary departments
- the legal basis for informing individuals and veterinary staff about veterinary medicines: their rational use, possible side effects, providing the necessary advice
- the legal basis for the necessary intrapharmacy control of conditions and terms of storage of veterinary drugs
- modern information technology in interaction with the subjects of drug circulation, taking into account the requirements of information security
- modern technical means and digital technologies used in professional activities by pharmaceutical professionals at all stages of drug circulation
- modern medical and pharmaceutical information systems and databases used in professional activities by pharmaceutical professionals at all stages of drug circulation

**Be able to:**

- apply in practice the methods and techniques of marketing analysis in the system of drug supply to the population, medical and other organizations
- make organizational and administrative documentation in accordance with state standards
- to carry out certification of workplaces, instructions on health and safety of pharmaceutical workers and support staff, measures to prevent environmental violations and violations of health and safety
- choose accounting methods and prepare documents on accounting policies
- perform pharmaceutical expertise of prescriptions and requirements of medical and other organizations
- sell drugs and other pharmaceutical products
- determine the cost of finished drugs and pharmaceutical forms of extemporaneous production
- record prescriptions in the relevant documentation
- to carry out the object-quantitative accounting of drugs and other pharmaceutical products in pharmaceutical companies
- provide the population entitled to state social assistance
- make reasonable economic decisions when carrying out activities in the field of circulation of medicines;
- determine the demand and need for different groups of pharmaceutical products
- draw up standard documentation for the production, storage, registration and delivery of medicines and other pharmaceutical products from pharmacies
- analyze the condition of inventory and identify sources of financing
- select the supplier, conclude supply contracts and draw up documentation for claims
- Place purchase orders
- make up the prices for pharmaceutical products at all stages of the supply chain, including intra-pharmacy manufacturing
- provide the necessary conditions for storage of drugs and other pharmaceutical products during transportation and in the institutions of the distribution network
- use the principles of merchandising and methods of sales promotion of pharmacy assortment of goods
- track cash flow in the cash register and on the account of the pharmacy

- take inventory of inventory, cash and settlements
- to conduct accounting of business transactions
- to analyze the financial and economic situation of the pharmacy and develop measures to improve the efficiency of pharmaceutical organizations
- to forecast the economic performance of pharmaceutical organizations and their subdivisions
- to provide information support for the pharmaceutical business
- to manage the personnel of pharmaceutical organizations, to implement an effective personnel policy with the use of motivational guidelines
- manage social and psychological processes, prevent conflict situations in the team and in interaction with consumers of pharmaceutical goods and services
- to provide information and consulting assistance to pharmaceutical organizations visitors in the selection of drugs and other pharmacy assortment products, as well as informing medical professionals about drugs, their synonyms and analogues, possible side effects and interactions
- to make a decision on the replacement of the prescribed medicinal product with synonyms or analogues in the prescribed manner on the basis of information about groups of medicinal products and synonyms within one international nonproprietary name and their prices
- determine whether a medicinal product for medical use does not comply with the established requirements or the data on the efficacy and safety of the medicinal product do not comply with the data on the medicinal product contained in the instructions for its use
- select the best suppliers and procurement processes in the light of previously conducted market research on medicines for veterinary use
- sale and dispensing of veterinary drugs to individuals and veterinary clinics by following the respective dispensing procedures
- prepare for the sale of veterinary drugs by laying them out in the sales area and in showcases of veterinary drugstores and veterinary departments
- informing individuals and veterinary staff about veterinary medicines: their rational use, possible side effects, providing the necessary advice
- execute the necessary intrapharmacy control over the conditions and terms of storage of veterinary drugs
- use modern information technologies in order to solve professional tasks
- search for information necessary for solving professional problems, using legal reference systems and professional pharmaceutical databases
- use automated information systems in internal processes of pharmaceutical organization and for interaction with clients and suppliers
- use modern technical means and digital technologies, used in professional practice by pharmaceutical professionals at all stages of circulation of medicines
- use modern medical and pharmaceutical information systems and databases, used in professional activity by pharmaceutical specialists at all stages of circulation of medicines

**Possess:**

- methods, techniques of organizing work in the main links of the distribution system of the pharmaceutical market, the organization of pharmaceutical activities
- normative-legal documentation regulating the procedure of work of the pharmacy organization for receipt of prescriptions and requirements of medical and other organizations
- regulatory and legal documentation governing the work of pharmacy organizations on release of drugs and other pharmaceutical products to the public, medical and other organizations
- regulatory, reference and scientific literature for solving professional problems
- skills of pharmaceutical expertise of prescriptions and requirements of medical and other organizations, dispensing drugs and other pharmaceutical products on prescriptions and requirements

- methods of personnel management in pharmaceutical organizations, compliance with health and safety rules and labor legislation, ensuring safe working conditions for staff
- skills in developing accounting policies, accounting for inventories: cash and settlements
- Skills in preparing reports for internal and external users of accounting information
- methods of financial and economic analysis and analysis of the main indicators of pharmacy activities
- skills in analyzing the state of property and liabilities of pharmacies
- skills of business risk assessment
- skills in making sound economic decisions in carrying out activities in the field of drug circulation
- the skills of segmenting the pharmaceutical market and selecting target segments
- methods of demand studies, forming an assortment and forecasting the demand for medicines and other pharmaceutical products
- ways of determining the information needs of consumers of medicines and other pharmaceutical products, providing information and advisory services, the use of modern information management resources for pharmaceutical business
- how to formulate prices for drugs and other pharmaceutical goods
- skills in administrative records management
- skills of information and consulting assistance to visitors of pharmaceutical organizations in choosing drugs and other pharmacy assortment products, as well as informing medical professionals about drugs, their synonyms and analogues, possible side effects and interactions
- skills of substitution of prescribed medicines with synonyms or similar drugs in the prescribed order on the basis of information about groups of medicines and synonyms within one international nonproprietary name and their prices
- skills in determining whether a medicinal product for medical use does not meet the established requirements or whether the data on the efficacy and safety of a medicinal product does not match the data on the medicinal product contained in the instructions for its use
- skills in choosing the best suppliers and procurement processes based on previous market research for medicines for veterinary use
- the skills of selling and dispensing medicines for veterinary use to individuals and veterinary clinics by following the proper dispensing procedures
- the skills of preparing veterinary drugs for sale by laying them out in the sales area and in showcases of veterinary drugstores and veterinary departments
- The skills of informing individuals and veterinary staff about veterinary medicines: their rational use, possible side effects and providing necessary advice
- Skills in implementing the necessary intrapharmacy control over the conditions and terms of storage of veterinary medicines
- Skills in using modern information technologies for professional tasks
- The skills of information retrieval needed for solving professional tasks with the help of legal reference systems and professional pharmaceutical databases
- skills of using automated information systems in internal processes of pharmaceutical organizations and for interaction with clients and suppliers
- skills in using modern technical means and digital technologies, used in professional activities by pharmaceutical professionals at all stages of circulation of medicines
- skills in using modern medical and pharmaceutical information systems and databases, used in professional activity by pharmaceutical specialists at all stages of circulation of medicines

**2. Position of the academic discipline in the structure of the General Educational Program of Higher Education (GEP HE) of the organization.**

2.1. The discipline refers to the core part of Block 1 of GEP HE (B1.C.34).

The discipline is taught in 5-8 semesters/3-4 years of study.

**2.2. The following knowledge, skills and abilities formed by previous academic disciplines are required for mastering the discipline:**

- introduction to the specialty;
- economic theory;
- mathematics;
- computer science;
- information support of life cycle of medicines;
- information technologies in pharmacy;
- pharmaceutical propaedeutic practice.

**2.3. Mastering the discipline is required for forming the following knowledge, skills and abilities for subsequent academic disciplines:**

- medical and pharmaceutical merchandising
- legal basics of a pharmacist;
- pharmaceutical marketing;
- pharmaceutical logistics;
- pharmaceutical management;
- project management in pharmacy;
- promotion of goods on the pharmaceutical market;
- organization of drug supply to the population;
- basics of entrepreneurial activity in pharmacy;
- state registration and examination of medicines;
- state control and supervision in the field of drug circulation;
- pharmaceutical counseling and information (internship);
- practice in management and economics of pharmaceutical organizations (industrial practice).

**3. Deliverables of mastering the academic discipline and metrics of competence acquisition**

Mastering the discipline aims at acquiring the following universal (UC) or/and general professional (GPC) or/and professional (PC) competencies

№	Competence code	The content of the competence (or its part)	Code and name of the competence acquisition metric	As a result of mastering the discipline, the students should:		
				know	be able to	possess
1.	UC-2	Able to manage the project at all stages of its life cycle	UC-2.1. Formulates a project task on the basis of the set problems and a method of its solutions through the implementation of the project management UC-2.2. Develops a	– theoretical foundations and basic concepts and definitions in the field of project management; – basic legislative and regulatory documents, basic	– formulate project goals, formulate requirements for the project; – define the expected results of the tasks and develop different	– the skills of designing the solution of the problem, choosing the best way to solve it, assessing the likely risks and limitations in the choice of solutions

			<p>project concept within the framework of the designated problem: formulates the purpose, tasks, justifies the relevance, significance, expected results and possible areas of their application</p> <p>UC-2.3. Plans necessary resources, including taking into account their replaceability</p> <p>UC-2.4. Develops a project implementation plan using planning tools</p> <p>UC-2.5. Monitors the progress of the project, corrects deviations, makes additional changes to the project implementation plan, clarifies zones of responsibilities of project participants</p>	<p>ethical constraints accepted in society, basic concepts, methods of developing and justifying task solutions within the framework of the set goal, based on the current legal regulations, available resources and limitations, methods of selecting the optimal task solution;</p> <p>– the most important principles, functions and methods of project management;</p> <p>– methods of achieving the set goal, including the use of service capabilities of the relevant information (legal reference) systems.</p>	<p>types of plans to implement projects taking into account the current legal norms, available resources and limitations, to search for the best ways to solve the tasks, taking into account the current legal norms, available resources and limitations;</p> <p>– participate in the exchange of information, knowledge and experience in the interests of the team task, presenting professional tasks;</p> <p>– organize and supervise the implementation of the project.</p>	<p>to the problems set;</p> <p>– special terminology in the field of project management;</p> <p>– skills of applying different tools in project activities.</p>
2.	UC-9	<p>Able to make informed economic decisions in various areas of life</p>	<p>UC-9.1. Knows the main points and methods of economic science and management, their legal reflection and provision in the Russian legislation; the current state of the world economy and the peculiarities of the functioning of Russian markets; the role of the state in coordinating long-term and short-term economic interests of societies.</p> <p>UC-9.2. Uses economic knowledge to understand the driving forces and patterns of the historical process, to analyze socially significant problems and solve social and professional tasks.</p> <p>UC-9.3. Finds effective organizational and</p>	<p>– legal, legislative and administrative procedures and policies relating to all aspects of pharmaceuticals</p> <p>– understanding of the use value and consumer properties of drugs and other pharmaceutical products and the factors that affect them</p> <p>– record keeping by pharmaceutical wholesalers and retailers</p> <p>– basic principles of state regulation and the process of pricing of pharmaceutical products at all stages of the movement of goods</p> <p>– methods of determining the</p>	<p>– make reasonable economic decisions when carrying out activities in the field of circulation of medicines;</p> <p>– determine the demand and need for various groups of pharmaceutical products</p> <p>– create prices for the goods of pharmaceutical assortment at all stages of commodity circulation, including intra-pharmacy manufacturing</p> <p>– to analyze the financial and economic situation of the pharmacy and develop measures to improve the efficiency of</p>	<p>– methods of financial and economic analysis, analysis of the main indicators of pharmacy activities</p> <p>– skills in analyzing the state of property and liabilities of a pharmacy</p> <p>– skills in assessing the degree of entrepreneurial risk</p> <p>– skills to make sound economic decisions in carrying out activities in the field of circulation of medicines;</p> <p>– methods of studying demand, forming an assortment and forecasting requirements for</p>

			<p>managerial solutions, independently masters applied economic knowledge, necessary for work in the professional field.</p>	<p>needs and demand for various groups of drugs and other pharmaceutical products</p> <ul style="list-style-type: none"> <li>– basic accounting principles of inventory, cash and settlements</li> <li>– taxation systems of pharmaceutical companies</li> <li>– methods of financial analysis of the main indicators of pharmaceutical organizations activities</li> <li>– principles of audit and management of business processes in pharmaceutical organizations</li> <li>– principles of developing a business plan for pharmaceutical organizations</li> </ul>	<p>pharmaceutical organizations</p> <ul style="list-style-type: none"> <li>– to forecast the economic performance of pharmaceutical organizations and their structural subdivisions</li> </ul>	<p>drugs and other pharmaceutical products</p> <ul style="list-style-type: none"> <li>– how to form prices for medicines and other pharmaceutical products</li> </ul>
3.	GPC-3	<p>Able to carry out professional activities taking into account specific economic, environmental, social factors within the framework of the system of regulations of the medicine circulation sphere</p>	<p>GPC-3.1. Complies with norms and rules established by the authorized state authorities when solving the tasks of professional activity in the field of medicine circulation</p> <p>GPC-3.2. Takes into account economic and social factors influencing the financial and economic activities of pharmaceutical organizations when making management decisions</p>	<ul style="list-style-type: none"> <li>– the structure of the modern health care system of the Russian Federation,</li> <li>– the basics of the legislation of the Russian Federation on the protection of citizens' health,</li> <li>– basic regulatory and legal documents governing relations in the field of circulation of medicines</li> <li>– the state guarantees the availability of medicines, the basics of the organization of drug supply for outpatients and inpatients drugs at full cost, as well as citizens eligible for social assistance</li> <li>– the procedure and requirements</li> </ul>	<ul style="list-style-type: none"> <li>– to perform the types of work or services constituting pharmaceutical activities and activities in the field of drug circulation in compliance with the requirements of the legislation of the Russian Federation in the field of health protection</li> </ul>	<ul style="list-style-type: none"> <li>– regulatory and legal documentation regulating the procedure for pharmaceutical activities and activities in the field of drug circulation</li> </ul>

				<p>for the implementation of pharmaceutical activities</p> <ul style="list-style-type: none"> <li>– legal norms relating to state control and supervision, as well as liability for offenses in the field of pharmaceutical activities</li> <li>– the norms of legislation relating to state regulation of labor relations between pharmaceutical professionals and organizations</li> </ul>		
4.	GPC-6	Able to understand the principles of modern information technologies and use them to solve the tasks of professional activity	<p>GPC-6.1. Applies modern information technologies in the interaction with parties to the circulation of medicinal products taking into account the requirements of information security</p> <p>GPC-6.2. Performs an effective search for information necessary to solve the tasks of professional activity using legal reference systems and professional pharmaceutical databases</p> <p>GPC-6.4. Applies automated information systems in the internal processes of the pharmaceutical organization, as well as for interactions with customers and suppliers</p>	<ul style="list-style-type: none"> <li>– modern information technologies in interaction with the subjects of drug circulation, taking into account information security requirements</li> </ul>	<ul style="list-style-type: none"> <li>– apply modern information technologies for solving professional tasks</li> <li>– search for information, necessary for solving problems of professional activity, using legal reference systems and professional pharmaceutical databases</li> <li>– use automated information systems in the internal processes of a pharmaceutical organization, as well as for interaction with customers and suppliers</li> </ul>	<ul style="list-style-type: none"> <li>– skills in applying modern information technologies to solve professional problems</li> <li>– skills in searching for information, necessary for solving problems of professional activity, using legal reference systems and professional pharmaceutical databases</li> <li>– skills in using automated information systems in internal processes of pharmaceutical organization and for interaction with clients and suppliers</li> </ul>
5.	PC-2	Able to solve the tasks of professional activity in the implementation of the release and sale of medicines and other products of the pharmacy	<p>PC-2.1. Conducts pharmaceutical examination of prescriptions and requisition notes, as well as their registration and rating in accordance with the established procedure</p> <p>PC-2.2. Sells and releases medicines for medical use and other pharmacy assortment</p>	<ul style="list-style-type: none"> <li>– rules of pharmaceutical expertise of prescriptions and claims of medical and other organizations</li> <li>– procedure for dispensing pharmaceuticals and other pharmaceutical products from the</li> </ul>	<ul style="list-style-type: none"> <li>– carry out pharmaceutical expertise of prescriptions and requirements of medical and other organizations</li> <li>– sell pharmaceuticals and other pharmaceutical products</li> <li>– prepare</li> </ul>	<ul style="list-style-type: none"> <li>– methods, techniques of organizing work in the main links of the distribution system of the pharmaceutical market, the organization of pharmaceutical activities</li> <li>– normative-legal documentation</li> </ul>

		<p>range through pharmaceutical and medical organizations, incl. with the use of modern technical means and digital technologies</p>	<p>products to individuals, as well as releases them to divisions of medical organizations, monitoring compliance with the procedure for the release of medicines for medical use and other pharmacy assortment products</p> <p>PC-2.3. Performs office work on the management of cash, organizational and administrative, accounting documents for retail sales</p> <p>PC-2.4. Performs office work on the management of organizational and administrative, payment accounting documents for retail sales</p> <p>PC-2.5. Carries out pre-sale preparation, organizes and carries out the display of medicines and pharmacy assortment goods in the sales hall and (or) showcases of departments of the pharmacy organization</p> <p>PC-2.6. Uses modern technical means and digital technologies to solve the tasks of professional activity in the implementation of the release and sale of medicines and other products of the pharmacy assortment through pharmaceutical and medical organizations</p>	<p>pharmacy to the public, medical and other organizations</p> <ul style="list-style-type: none"> <li>– maintenance of accounting records by pharmaceutical enterprises of wholesale and retail levels</li> <li>– methods of preparing reports for internal and external users of accounting information</li> <li>– basics of record keeping in pharmaceutical organizations</li> <li>– techniques for generating external (accounting, statistical, tax) reporting for pharmaceutical organizations</li> <li>– the procedure for pre-sale preparation, organization and lay-out of medicines and pharmacy goods in the sales area and/or in the shop windows of the pharmacy departments</li> <li>– basics of organizing pharmaceutical care (outpatient and inpatient) to different groups of population</li> <li>– basics of drug supply organization for outpatients and inpatients with medicines and other pharmaceutical products at full cost, as well as for citizens eligible for social assistance</li> <li>– basics of organizing the procurement of</li> </ul>	<p>organizational and administrative documentation in accordance with state standards</p> <ul style="list-style-type: none"> <li>– choose accounting methods and prepare documents on accounting policies</li> <li>– draw up standard documentation for manufacturing, storage, registration and delivery of medicines and other pharmaceutical products from pharmacy organizations</li> <li>– use merchandising principles and methods of sales promotion of pharmacy goods</li> <li>– use in practice the methods and techniques of marketing analysis in the system of drug supply to the population, medical and other organizations</li> <li>– provide the population entitled to state social assistance</li> <li>– use modern technical means and digital technologies, used in professional activities by pharmaceutical professionals at all stages of circulation of medicines</li> </ul>	<p>regulating the procedure of work of the pharmacy organization for receipt of prescriptions and requirements of medical and other organizations</p> <ul style="list-style-type: none"> <li>– regulatory and legal documentation governing the work of pharmacy organizations on release of drugs and other pharmaceutical products to the public, medical and other organizations</li> <li>– regulatory, reference and scientific literature for solving professional problems</li> <li>– skills of pharmaceutical expertise of prescriptions and claims of medical and other organizations, dispensing drugs and other pharmaceutical goods on prescriptions and claims</li> <li>– skills in preparing reports for internal and external users of accounting information</li> <li>– skills in administrative record keeping</li> <li>– the skills of using modern technical means and digital technologies, used in professional practice by pharmaceutical specialists at all stages of circulation of medicines</li> </ul>
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				<p>medical equipment for state and municipal needs</p> <ul style="list-style-type: none"> <li>– modern technical means and digital technologies used in professional activities by pharmaceutical specialists at all stages of drug circulation</li> </ul>		
6.	PC-4	<p>Able to participate in monitoring the quality, effectiveness and safety of medicines and medicinal plant raw materials</p>	<p>PC-4.4. Informs in accordance with the procedure established by law about the non-compliance of the medicinal product for medical use with the established requirements or about the non-compliance of the data on the effectiveness and safety of the medicinal product with the data on the medicinal product contained in the instructions for its use</p>	<ul style="list-style-type: none"> <li>– legislative basis for the procedure for determining the non-compliance of a medicinal product for medical use with the established requirements or non-compliance of the data on the effectiveness and safety of a medicinal product with the data on the medicinal product contained in the instructions for its use</li> </ul>	<ul style="list-style-type: none"> <li>– determine whether a medicinal product for medical use does not comply with established requirements or whether the data on the efficacy and safety of a medicinal product do not comply with the data on the medicinal product contained in the instructions for its use</li> </ul>	<ul style="list-style-type: none"> <li>– skills in determining whether a medicinal product for medical use does not meet established requirements, or whether the data on the efficacy and safety of a medicinal product do not match the data on the medicinal product contained in the instructions for its use</li> </ul>
7.	PC-5	<p>Able to take part in planning and organizing the resource provision of a pharmaceutical organization</p>	<p>PC-5.1. Determines the economic indicators of inventories of medicines and other pharmacy products  PC-5.2. Selects optimal suppliers and organizes purchasing processes based on the results of market research of suppliers of medicines for medical use and other pharmacy products  PC-5.3. Controls the execution of contracts for the supply of medicines for medical use and other goods of pharmacy assortment  PC-5.4. Conducts acceptance control of incoming medicines and other pharmacy products, checking and issuing accompanying documents in accordance with the</p>	<ul style="list-style-type: none"> <li>– peculiarities of the pharmacist's work in concluding contracts with enterprises, institutions in accordance with the law</li> <li>– notion of consumer value, consumer properties of drugs and other pharmaceutical goods and the factors affecting them</li> <li>– methods of drug and other pharmaceutical goods assortment analysis</li> <li>– requirements for labeling, packaging and storage of drugs and other pharmaceutical</li> </ul>	<ul style="list-style-type: none"> <li>– determine the demand and need for various groups of pharmaceutical products</li> <li>– analyze the state of inventory and identify sources of financing</li> <li>– select a supplier, conclude supply contracts and prepare documentation in claim form</li> <li>– place purchase orders</li> <li>– establish prices for pharmaceutical products at all stages of the commodity circulation, including intra-pharmacy manufacturing</li> <li>– provide the necessary conditions for</li> </ul>	<ul style="list-style-type: none"> <li>– methods of financial and economic analysis, analysis of the main indicators of pharmacy activities</li> <li>– skills in analyzing the state of property and liabilities of a pharmacy</li> <li>– skills of assessing the degree of entrepreneurial risk</li> <li>– skills of segmentation of the pharmaceutical market and selecting target segments</li> <li>– methods of studying demand, forming an assortment and forecasting demand for drugs</li> </ul>

			<p>established procedure PC-5.5. Carries out the withdrawal from circulation of medicines and pharmacy assortment goods that have fallen into disrepair, expired, falsified, counterfeit and substandard products PC-5.6. Performs strict record keeping and storage of medicines in accordance with the established procedure PC-5.7. Organizes control over the availability and storage conditions of medicines for medical use and other products of the pharmacy assortment</p>	<p>products</p> <ul style="list-style-type: none"> <li>– basics of team management</li> <li>– work organization of average pharmaceutical and auxiliary personnel in pharmaceutical companies</li> <li>– basic principles of state regulation and pricing process of pharmaceutical goods on all stages of the movement of goods</li> <li>– methods of determining the needs and demand for different groups of drugs and other pharmaceutical products</li> <li>– technology for storing drugs and other pharmaceutical products</li> <li>– organization of manufacturing of extemporaneous dosage forms on the recipes and requirements of medical and other organizations</li> <li>– basic accounting principles of inventory, cash and settlements</li> <li>– principles and rules for settlements with personnel</li> <li>– basic forms of cashless payments for goods and services</li> <li>– taxation system in pharmaceutical companies</li> <li>– methods of financial analysis of the main indicators of pharmaceutical organizations activities</li> </ul>	<p>storage of drugs and other pharmaceutical products during transportation and in the institutions of the distribution network</p> <ul style="list-style-type: none"> <li>– account for cash flow in the cash register of the pharmacy and on the current account</li> <li>– take inventory of inventory, cash and settlements</li> <li>– to conduct accounting of business transactions</li> <li>– to analyze the financial and economic situation of the pharmacy and develop measures to improve the efficiency of pharmaceutical organizations</li> <li>– to forecast the economic performance of pharmaceutical organizations and their subdivisions</li> <li>– to carry out certification of workplaces, instructions on health and safety of pharmaceutical workers and auxiliary personnel, measures to prevent environmental violations and violations of health and safety</li> <li>– determine the cost of finished drugs and pharmaceutical forms of extemporaneous manufacturing</li> <li>– record prescriptions in the relevant</li> </ul>	<p>and other pharmaceutical goods</p> <ul style="list-style-type: none"> <li>– how to formulate prices for drugs and other pharmaceutical products</li> <li>– methods of personnel management in pharmaceutical organizations, compliance with labor safety rules and safety and labor legislation, ensuring safe working conditions for staff</li> <li>– skills in developing accounting policies, accounting of inventories: cash and settlements</li> </ul>
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				<ul style="list-style-type: none"> <li>– principles of audit and management of business processes in pharmaceutical organizations</li> <li>– principles of developing a business plan for pharmaceutical organizations</li> <li>– methods of recruitment, placement and accounting of personnel movement</li> </ul>	<ul style="list-style-type: none"> <li>documentation</li> <li>– perform quantity and object accounting of drugs and other pharmaceutical products in pharmaceutical institutions</li> <li>– to manage the staff of pharmaceutical organizations, to implement an effective personnel policy with the use of motivational guidelines</li> <li>– to manage the social and psychological processes, prevent conflict situations in the team and in interaction with consumers of pharmaceutical goods and services</li> </ul>	
8.	PC-8	Able to solve the tasks of professional activity within the framework of pharmaceutical activity in the field of circulation of medicines for veterinary use	<p>PC-8.1. Participates in the selection of optimal suppliers and purchasing processes, taking into account previously conducted market research of medicines for veterinary applications</p> <p>PC-8.2. Sells and releases medicinal products for veterinary use to individuals, as well as veterinary clinics following the appropriate procedure for release</p> <p>PC-8.3. Carries out preparation for the sale of veterinary medicines, carrying out their display in the sales hall and showcases of veterinary pharmacies and veterinary departments</p> <p>PC-8.4. Informs individuals and employees of the veterinary service about veterinary medicines: their rational use, possible</p>	<ul style="list-style-type: none"> <li>– the legislative basis for the selection of optimal suppliers and procurement processes, taking into account the previously conducted studies of the market of drugs for veterinary use</li> <li>– the legislative basis for the sale and dispensing of veterinary drugs to individuals and veterinary clinics by following the proper dispensing procedure</li> <li>– the legislative basis for the preparation for the sale of veterinary drugs, carrying out their deposition in the sales area and in showcases of veterinary pharmacies and veterinary departments</li> <li>– the legislative</li> </ul>	<ul style="list-style-type: none"> <li>– select the best suppliers and procurement processes taking into account the previously conducted studies of the veterinary drugs market</li> <li>– sale and dispensing of veterinary drugs to individuals and veterinary clinics by following the proper dispensing procedure</li> <li>– preparing for the sale of veterinary drugs by laying them out in the sales area and in showcases of veterinary drugstores and veterinary departments</li> <li>– informing individuals and veterinary staff about veterinary medicines: their rational use, possible side</li> </ul>	<ul style="list-style-type: none"> <li>– skills in selecting the best suppliers and procurement processes taking into account the previously conducted market research of medicines for veterinary use</li> <li>– skills in selling and dispensing veterinary drugs to individuals and veterinary clinics by following the proper dispensing procedure</li> <li>– the skills of preparing veterinary drugs for sale by laying them out in the sales area and in showcases of veterinary drugstores and veterinary departments</li> <li>– the skills of informing individuals and veterinary staff</li> </ul>

			<p>side effects, providing at the same time, the necessary consulting assistance</p> <p>PC-8.5. Performs the necessary intrapharmacy control of the conditions and terms of storage of medicines for veterinary use</p>	<p>basis for informing individuals and veterinary staff about drugs for veterinary use: their rational use, possible side effects, providing the necessary advice</p> <p>– the legislative basis for the necessary intrapharmacy control of the conditions and terms of storage of medicines for veterinary use</p>	<p>effects, providing the necessary advice</p> <p>– exercise the necessary intrapharmacy control of the conditions and terms of storage of veterinary drugs</p>	<p>about veterinary medicines: their rational use, possible side effects and providing necessary advice</p> <p>– the skills of carrying out the necessary intrapharmacy control of the conditions and terms of storage of veterinary medicines</p>
9.	PC-9	<p>Able to solve tasks of professional activities in the transfer of medicines through pharmaceutical and medical organizations</p>	<p>PC-9.1. Sells and releases medicines for medical use through pharmaceutical and medical organizations following the required procedure of release and transfer</p> <p>PC-9.2. Performs pharmaceutical information and consulting during the sale, release and transfer of medicines for medical use</p> <p>PC-9.3. Conducts pharmaceutical examination of documents, as well as their registration and rating in accordance with the established procedure during the release, sale and transfer of medicines for medical use through pharmaceutical and medical organizations</p>	<p>– basics of organizing pharmaceutical care (outpatient and inpatient) to different groups of population</p> <p>– basics of the organization of drug supply for outpatients and inpatients with medicines and other pharmaceutical products at full cost, as well as citizens who are eligible for social assistance</p> <p>– basics of the organization of procurement of medical supplies for state and municipal needs</p> <p>– rules for pharmaceutical reviews of prescriptions and claims by medical and other organizations</p> <p>– legislative basis for informational and advisory assistance to pharmaceutical organization visitors in the choice of drugs and other pharmacy</p>	<p>– basics of organizing pharmaceutical care (outpatient and inpatient) to different groups of population</p> <p>– basics of the organization of drug supply for outpatients and inpatients with medicines and other pharmaceutical products at full cost, as well as citizens who are eligible for social assistance</p> <p>– basics of the organization of procurement of medical supplies for state and municipal needs</p> <p>– rules for pharmaceutical reviews of prescriptions and claims by medical and other organizations</p> <p>– legislative basis for informational and advisory assistance to pharmaceutical organization visitors in the choice of drugs and other pharmacy</p>	<p>– methods, techniques of organizing work in the main links of the pharmaceutical market distribution system, organization of pharmaceutical activities</p> <p>– skills of pharmaceutical expertise of prescriptions and requirements of medical and other organizations, dispensing medicines and other pharmaceutical products according to prescriptions and requirements</p> <p>– skills of information and consulting assistance to visitors of pharmaceutical organization in the choice of drugs and other pharmacy assortment products, as well as informing medical professionals about drugs, their synonyms and analogues, possible side</p>

				assortment products, as well as informing medical professionals about drugs, their synonyms and analogues, possible side effects and interactions	assortment products, as well as informing medical professionals about drugs, their synonyms and analogues, possible side effects and interactions	effects and interactions
10.	PC-10	Able to carry out measures to control (supervise) the activities of legal entities and individuals licensed for pharmaceutical activities, to comply with mandatory requirements	PC-10.1. Supervises the activities of legal entities and individuals who have licenses for pharmaceutical activity PC-10.2. Monitors the procedure established by law regarding the compliance of available medicines for medical use, instructions and data on its safety and effectiveness	<ul style="list-style-type: none"> <li>– legal, legislative and administrative procedures and strategies concerning all aspects of pharmaceutical activities</li> <li>– the structure of the modern health care system of the Russian Federation, the basics of the legislation of the Russian Federation on the protection of citizens' health, the basic regulatory and legal documents governing relations in the field of drug circulation</li> <li>– procedures and requirements for pharmaceutical activities</li> <li>– legislation norms relating to state control and supervision, as well as responsibility for offenses in the field of pharmaceutical activities</li> <li>– the norms of legislation relating to state regulation of labor relations between pharmaceutical professionals and organizations</li> </ul>	– carry out the types of work or services constituting pharmaceutical activities and activities in the field of drug circulation in compliance with the requirements of the legislation of the Russian Federation in the field of health protection	– regulatory and legal documentation regulating the procedure for pharmaceutical activities and activities in the field of drug circulation

**4. Sections of the academic discipline and competencies that are formed when mastering them**

№	Competence code	Section name of the discipline	The content of the section in teaching units
1	UC-2 GPC-3 GPC-6 PC-2 PC-4 PC-5 PC-8 PC-9 PC-10	Basics of state regulation of drug circulation	State regulation of pharmaceutical activities as an element of the health care system in the Russian Federation System of state regulation of drug circulation Basics of state regulation of drugs production Basics of state regulation of pharmaceutical activities Standards of good practice in the system of pharmaceutical regulation
2	UC-2 UC-9 GPC-3 PC-5 PC-8	Fundamentals of Pharmaceutical Economics	The action of basic economic laws in the pharmaceutical market Theory of consumer behavior and pharmacy assortment products competitiveness
3	UC-2 UC-9 GPC-3 PC-5 PC-8	Accounting and planning procedures in pharmaceutical organizations	Basic concepts of accounting theory. Classification of economic assets of the pharmacy organization. Elements of the method of accounting. Accounting policy. Accounting for fixed assets and intangible assets. Accounting for inventories: materials, low-value and quickly-moving items, auxiliary materials, containers, medicinal plant raw materials, finished products and goods. Accounting for cash and settlements. Accounting for payments to personnel. Inventory of inventory, cash and settlements in the pharmacy. Accounting reports. Analysis of the results of financial and economic activity. Tax accounting in a pharmacy organization. Pharmaceutical organization's commodity policy. Pricing policy of pharmaceutical organization. Fundamentals of planning economic indicators. Planning of goods turnover. Planning resources of goods. Planning costs of circulation Revenue and profit planning
4	UC-2 GPC-3 GPC-6 PC-2 PC-4 PC-5 PC-8 PC-9 PC-10	The procedure for circulation of drugs in wholesale and retail pharmaceutical organizations	General principles of the organization of acceptance and storage of goods in a pharmaceutical organization. General principles of the organization of acceptance and storage of goods in the pharmaceutical organization. Organization and implementation of pharmaceutical information and counseling. Organization of the production function of the pharmacy. In-pharmacy quality control. Sanitary and hygienic requirements in the activities of pharmaceutical organizations. Quality management system in pharmaceutical organization. State regulation of the circulation of controlled groups of drugs. State policy of the Russian Federation in the field of circulation of narcotic drugs and psychotropic substances. Features of the circulation of medical devices, dietary

		supplements and other pharmacy assortment products. The procedure for destroying medicines and other pharmacy assortment products.
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## 5. Volume of the academic discipline and types of academic work

Type of educational work	Labor intensity		Labor intensity (AH) in semesters			
	volume in credit units (CU)	volume in academic hours (AH)	5	6	7	8
Classroom work, including	17	612	66	66	108	108
Lectures (L)	2,33	84	14	14	28	28
Laboratory practicum (LP)*	Laboratory practicums are not stipulated					
Practicals (P)	7,33	264	52	52	80	80
Seminars (S)	Seminars are not stipulated					
Student's individual work (SIW)	6,33	228	42	42	72	72
Mid-term assessment				credit	credit	
credit/exam ( <i>specify the type</i> )						36
<b>TOTAL LABOR INTENSITY</b>	<b>17</b>	<b>612</b>	<b>108</b>	<b>108</b>	<b>180</b>	<b>216</b>

## 6. Content of the academic discipline

### 6.1. Sections of the discipline and types of academic work

№	Name of the section of the academic discipline	Types of academic work* (in AH)					
		L	LP	P	S	SIW	total
1	Basics of state regulation of drug circulation	14		52		42	108
2	Basics of pharmaceutical economics	14		52		42	108
3	The procedure of accounting and planning in pharmaceutical organizations	28		80		72	180
4	Circulation of drugs in wholesale and retail pharmaceutical organizations	28		80		72	216
	<b>TOTAL</b>	<b>84</b>		<b>264</b>		<b>228</b>	<b>612</b>

\* - L – lectures; LP – laboratory practicum; P – practicals; S – seminars; SIW – student's individual work.

### 6.2. Thematic schedule of educational work types:

#### 6.2.1 Thematic schedule of lectures

№ п/п	Name of lecture topics	Volume in AH			
		5	6	7	8
1.	State regulation of pharmaceutical activities as an element of the health care system in the Russian Federation	3			
2.	System of state regulation of drug circulation	3			
3.	Basics of state regulation of drugs production	3			

4.	Basics of state regulation of pharmaceutical activities	2			
5.	Good practice standards in pharmaceutical regulatory system	3			
6.	Basic economic laws on pharmaceutical market. Specifics of pharmaceutical economics. Theory of consumer behavior		4		
7.	Basics of consumer behavior theory		2		
8.	Prices and pricing in the pharmaceutical market		4		
9.	Product policy of pharmaceutical organization		4		
10.	Basic concepts of the theory of accounting. Classification of economic means of the pharmacy organization			2	
11.	Elements of accounting method. Accounting policy			2	
12.	Accounting for fixed assets and intangible assets			2	
13.	Accounting for the inventory: materials, low-value and quickly-moving items, auxiliary materials, containers, medicinal plant raw materials, finished products and goods			2	
14.	Cash management and accounting of cash transactions			2	
15.	Accounting for settlements with personnel			2	
16.	Inventory of inventory, cash and settlements in the pharmacy			2	
17.	Drawing up the results of financial and economic activity			2	
18.	Analysis of the results of financial and economic activity			2	
19.	Tax accounting in a pharmacy organization			2	
20.	Basics of planning economic indicators			2	
21.	Planning of goods turnover. Planning resources of goods			2	
22.	Planning costs of circulation			2	
23.	Planning income and profit			2	
24.	General principles of acceptance and storage of goods in a pharmaceutical organization. Requirements for the design of the shop floor of the pharmacy. Principles of merchandising in a pharmacy.				2
25.	General principles of organization of acceptance and storage of goods in a pharmaceutical organization				2
26.	General principles of the organization of acceptance and storage of goods in a pharmaceutical organization				2
27.	Organization of the work of the pharmacy on receipt of prescriptions, pharmaceutical examination of a prescription. Dispensation of medicinal products and other pharmacy assortment products.				2
28.	Organization of the work of the pharmacy on receipt of prescriptions, pharmaceutical examination of a prescription. Dispensation of medicinal products and other pharmacy assortment products.				2
29.	Organization of the work of the pharmacy on receipt of prescriptions, pharmaceutical examination of a prescription. Dispensation of medicinal products and other pharmacy assortment products.				2
30.	Organization of the production function of the pharmacy. In-pharmacy quality control.				2
31.	Organization of the production function of the pharmacy. In-pharmacy quality control.				2
32.	Sanitary and hygienic requirements in activities of				2

	pharmaceutical organizations. Quality management system in pharmaceutical organization.				
33.	State regulation of the circulation of controlled groups of medicines. State policy of the Russian Federation in the sphere of circulation of narcotic drugs and psychotropic substances.				2
34.	State regulation of the circulation of controlled groups of drugs. State policy of the Russian Federation in the sphere of circulation of narcotic drugs and psychotropic substances.				2
35.	State regulation of the circulation of controlled groups of drugs. State policy of the Russian Federation in the sphere of circulation of narcotic drugs and psychotropic substances.				2
36.	Peculiarities of the circulation of medical devices, dietary supplements and other pharmacy assortment products.				2
37.	Procedure for destruction of medicines and other pharmacy assortment products				2
	TOTAL (total – 84 AH)	14	14	28	28

#### 6.2.2. The thematic plan of laboratory practicums

Laboratory practicums are not stipulated.

#### 6.2.3. Thematic plan of practicals

№ п/п	Name of the topics of practicals	Volume in AH			
		5	6	7	8
1.	State regulation of pharmaceutical activities as an element of the health care system in the Russian Federation	12			
2.	System of state regulation of drug circulation	10			
3.	Basics of state regulation of drugs production	10			
4.	Basics of state regulation of pharmaceutical activities	10			
5.	Good practice standards in pharmaceutical regulatory system	10			
6.	Basic economic laws on pharmaceutical market. Specifics of pharmaceutical economics		14		
7.	Basics of consumer behavior theory		12		
8.	Prices and pricing in pharmaceutical market		14		
9.	Commodity policy of pharmaceutical organization		10		
10.	Credit		2		
11.	Basic concepts of accounting theory. Classification of economic assets of a pharmacy organization			6	
12.	Elements of accounting method. Accounting policy			6	
13.	Accounting for fixed assets and intangible assets			6	
14.	Accounting for the inventory: materials, low-value and quickly-moving items, auxiliary materials, containers, medicinal plant raw materials, finished products and goods			4	
15.	Cash management and accounting of cash transactions			6	
16.	Accounting for settlements with personnel			6	
17.	Inventory of inventory, cash and settlements in the pharmacy			6	
18.	Drawing up the results of financial and economic			6	

	activity				
19.	Analysis of the results of financial and economic activity			6	
20.	Tax accounting in a pharmacy organization			6	
21.	Basics of planning economic indicators			5	
22.	Planning of goods turnover. Planning resources of goods			5	
23.	Planning costs of circulation			4	
24.	Income and profit planning			4	
25.	Credit			2	
26.	General principles of the organization of acceptance and storage of goods in a pharmaceutical organization. Requirements for the design of the sales area of the pharmacy. Principles of merchandising in a pharmacy.				5
27.	General principles of the organization of acceptance and storage of goods in a pharmaceutical organization.				5
28.	General principles of the organization of acceptance and storage of goods in a pharmaceutical organization.				5
29.	Organization of the work of the pharmacy on receipt of prescriptions, pharmaceutical examination of a prescription. Dispensation of medicinal products and other pharmacy assortment products				5
30.	Organization of the work of the pharmacy on receipt of prescriptions, pharmaceutical examination of a prescription. Dispensation of medicinal products and other pharmacy assortment products				5
31.	Organization of the work of the pharmacy on receipt of prescriptions, pharmaceutical examination of a prescription. Dispensation of medicinal products and other pharmacy assortment products				5
32.	Organization and implementation of pharmaceutical information and counseling				5
33.	Organization of the production function of the pharmacy. In-pharmacy quality control				5
34.	Sanitary and hygienic requirements in the activities of pharmaceutical organizations				5
35.	Quality management system in pharmaceutical organization				5
36.	State regulation of the circulation of controlled groups of drugs. State policy of the Russian Federation in the sphere of circulation of narcotic drugs and psychotropic substances				5
37.	State regulation of the circulation of controlled groups of drugs. The state policy of the Russian Federation in the sphere of circulation of narcotic drugs and psychotropic substances				5
38.	State regulation of the circulation of controlled groups of drugs. The state policy of the Russian Federation in the sphere of circulation of narcotic drugs and psychotropic substances				10
39.	Peculiarities of the circulation of medical devices,				5

	dietary supplements and other pharmacy assortment products				
40.	The order of destruction of drugs and other pharmacy assortment products				5
	TOTAL (total – 80 AH)	52	52	80	80

#### 6.2.4. Thematic plan of seminars

Seminars are not stipulated.

#### 6.2.5. Types and topics of student's individual work (SIW)

№ п/п	Types and topics of SIW	Volume in AH			
		5	6	7	8
1	Working with literature and other sources of information on the studied section	6	2	20	20
2	Assignments in the form of reports and speeches	6	2	33	32
3	Working with electronic educational resources	6	2	20	20
4	Preparing course papers	24	36		
	TOTAL (total – 228 AH)	42	42	72	72

### 7. Types of assessment formats for ongoing monitoring and mid-term assessment

№	Semester No.	Types of control	Name of section of academic discipline	Assessment formats		
				types	number of test questions	number of test task options
1	2	3	4	5	6	7
1.	5	Current monitoring: Control of mastering the topic Monitoring the student's individual work	Basics of state regulation of drug circulation	Test work	5	5
2.	6	Current monitoring: Control of mastering the topic Monitoring the student's individual work	Fundamentals of Pharmaceutical Economics	Test work	5	5
3.	6	Mid-term assessment		Credit	3	40
4.	7	Current monitoring: Control of mastering the	Accounting and planning procedures in pharmaceutical	Test work	5	5

		topic Monitoring the student's individual work	organizations			
5.	7	Mid-term assessment		Credit	3	40
6.	8	Current monitoring: Control of mastering the topic Monitoring the student's individual work	The procedure for circulation of drugs in wholesale and retail pharmaceutical organizations	Test work	5	5
7.	8	Mid-term assessment		Exam	3	40

## 8. Educational, methodological and informational support for mastering the academic discipline (printed, electronic publications, the Internet and other network resources)

### 8.1. Key literature references

№	Name according to bibliographic requirements	Number of copies	
		at the department	in the library
1	The system of legislative regulation of circulation of medicines: Textbook / M.A. Mishchenko, E.V. Shalenkova, A.A. Ponomareva, N.N. Chesnokova, S.V. Kononova. – Nizhny Novgorod, 2021. – 77 p.	electronic resource	
2	Fundamentals of state legislation on manufacturing of medicines: Textbook / M M.A. Mishchenko, E.V. Shalenkova, A.A. Ponomareva, N.N. Chesnokova, S.V. Kononova. – Nizhny Novgorod, 2021. – 56 p.	electronic resource	
3	Fundamentals of state legislation on pharmaceutical activities: Textbook / M.A. Mishchenko, E.V. Shalenkova, A.A. Ponomareva, N.N. Chesnokova, S.V. Kononova. – Nizhny Novgorod, 2021. – 50 p.	electronic resource	
4	The concept of good practices in the pharmaceutical regulatory system: Textbook / M.A. Mishchenko, E.V. Shalenkova, A.A. Ponomareva, N.N. Chesnokova, S.V. Kononova. – Nizhny Novgorod, 2021. – 57 p.	electronic resource	
5	Fundamentals of pharmaceutical economics: Textbook / M.A. Mishchenko, E.V. Shalenkova, A.A. Ponomareva, N.N. Chesnokova, S.V. Kononova. – Nizhny Novgorod, 2021. – 125 p.	electronic resource	
6	Prices and pricing in the pharmaceutical market: Textbook / M.A. Mishchenko, E.V. Shalenkova, A.A. Ponomareva, N.N. Chesnokova, S.V. Kononova. – Nizhny Novgorod, 2021. – 77 p.	electronic resource	
7	Product policy of a pharmaceutical organization: Textbook / M.A. Mishchenko, E.V. Shalenkova, A.A.	electronic resource	

	Ponomareva, N.N. Chesnokova, S.V. Kononova. – Nizhny Novgorod, 2021. – 90 p.	
8	Fundamentals of planning economic indicators: Textbook / M.A. Mishchenko, E.V. Shalenkova, A.A. Ponomareva, N.N. Chesnokova, S.V. Kononova. – Nizhny Novgorod, 2021. – 78 p.	electronic resource
9	Planning of trade turnover of a pharmaceutical organization: Textbook / M.A. Mishchenko, E.V. Shalenkova, A.A. Ponomareva, N.N. Chesnokova, S.V. Kononova. – Nizhny Novgorod, 2021. – 78 p.	electronic resource
10	Planning of distribution costs of a pharmaceutical organization: Textbook / M.A. Mishchenko, E.V. Shalenkova, A.A. Ponomareva, N.N. Chesnokova, S.V. Kononova. – Nizhny Novgorod, 2021. – 60 p.	electronic resource
11	Income and profit planning of a pharmaceutical organization: Textbook / M.A. Mishchenko, E.V. Shalenkova, A.A. Ponomareva, N.N. Chesnokova, S.V. Kononova. – Nizhny Novgorod, 2021. – 70 p.	electronic resource
12	Accounting of financial and economic activities of a pharmacy organization: Textbook / M.A. Mishchenko, S.V. Kononova, N.N. Chesnokova, A.A. Ponomareva, E.V. Shalenkova. – Nizhny Novgorod, 2022. – 74 p.	electronic resource
13	Specific issues of accounting for the property of a pharmacy organization: Textbook / M.A. Mishchenko. – Nizhny Novgorod, 2022. – 50 p.	electronic resource
14	Basic principles of accounting of settlements with the personnel of a pharmacy organization: Textbook / M.A. Mishchenko. – Nizhny Novgorod, 2022. – 50 p.	electronic resource
15	The tax concept and tax management of pharmaceutical organizations: Textbook / M.A. Mishchenko. – Nizhny Novgorod, 2022. – 52 p.	electronic resource

## 8.2. Further reading

№	Name according to bibliographic requirements	Number of copies	
		at the department	in the library
1	The medicine lifecycle concept: Textbook / M.A. Mishchenko, S.V. Kononova, A.A Ponomareva. – Nizhny Novgorod, 2020. – 80 p.	electronic resource	
2	Information technologies in the medicine lifecycle management: Textbook / M.A. Mishchenko, S.V. Kononova, A.A Ponomareva. – Nizhny Novgorod, 2020. – 99 p.	electronic resource	
3	Evaluating the quality of pharmaceutical information: Textbook / M.A. Mishchenko, S.V. Kononova, A.A Ponomareva. – Nizhny Novgorod, 2020. – 98 p.	electronic resource	
4	Analysis and processing of pharmaceutical information: Textbook / M.A. Mishchenko, S.V. Kononova, A.A Ponomareva. – Nizhny Novgorod, 2020. – 95 p.	electronic resource	
5	Post-marketing evaluation of medicinal products –	electronic resource	

	pharmacoepidemiology: Textbook / M.A. Mishchenko, S.V. Kononova, A.A Ponomareva. – Nizhny Novgorod, 2020. – 53 p.	
6	Post-marketing evaluation of the medicinal products – pharmacoconomics: Textbook / M.A. Mishchenko, S.V. Kononova, A.A Ponomareva. – Nizhny Novgorod, 2020. – 107 p.	electronic resource
7	Post-marketing evaluation of medicinal products – pharmacovigilance: Textbook / M.A. Mishchenko, S.V. Kononova, A.A Ponomareva. – Nizhny Novgorod, 2020. – 70 p.	electronic resource
8	Fundamentals of the state regulation of pharmaceutical information that is advertising: Textbook / M.A. Mishchenko, S.V. Kononova, A.A Ponomareva. – Nizhny Novgorod, 2020. – 109 p.	electronic resource

### 8.3. Electronic educational resources for teaching academic subjects

#### 8.3.1. Internal Electronic Library System of the University (IELSU)

<i>№</i>	<i>Name of the electronic resource</i>	<i>Brief description (content)</i>	<i>Access conditions</i>	<i>Number of users</i>
1	Internal electronic library system (IELS) <a href="http://nbk.pimunn.net/MegaPro/Web">http://nbk.pimunn.net/MegaPro/Web</a>	Works of university teaching staff: textbooks, manuals, collections of tasks, teaching aids, laboratory works, monographs, collections of scientific works, scientific articles, dissertations, abstracts of dissertations, patents	From any computer and mobile device with individual login and password. Access mode: <a href="http://nbk.pimunn.net/MegaPro/Web">http://nbk.pimunn.net/MegaPro/Web</a>	Not limited

#### 8.3.2. Electronic educational resources acquired by the University

<i>№</i>	<i>Name of the electronic resource</i>	<i>Brief description (content)</i>	<i>Access conditions</i>	<i>Number of users</i>
1	Electronic legal reference system "Consultant Plus" (contract for free) <a href="http://www.consultant.ru">http://www.consultant.ru</a>	Regulatory documents regulating the activities of medical and pharmaceutical institutions From the scientific library computers	Access mode: <a href="http://www.consultant.ru/">http://www.consultant.ru/</a>	Not limited  Term of validity: Unlimited

#### 8.3.3 Open access resources

<i>№</i>	<i>Name of the electronic resource</i>	<i>Brief description (content)</i>	<i>Access conditions</i>
1	PubMed <a href="https://www.ncbi.nlm.nih.gov/pubmed">https://www.ncbi.nlm.nih.gov/pubmed</a>	US National Library of Medicine search engine for Medline, PreMedline databases	From any computer and mobile device. Access mode: <a href="https://www.ncbi.nlm.nih.gov">https://www.ncbi.nlm.nih.gov</a>

			/pubmed Not limited
2	Scopus database www.scopus.com	International abstract database of scientific citation From university computers, from any computer by individual login and password	Access mode: www.scopus.com Not limited
3	Web of Science Core Collection <a href="https://www.webofscience.com">https://www.webofscience.com</a>	International abstract database of scientific citation. From university computers, from any computer by individual login and password.	Access mode: <a href="https://www.webofscience.com">https://www.webofscience.com</a> Not limited

## **9. Material and technical support for mastering an academic discipline**

### 9.1. List of premises for classroom activities for the discipline

1. Classes for lectures and practical classes, equipped with multimedia and other means of training, allowing the use of simulation technologies, with standard sets of professional models (sets of protocols of clinical trials, formulary lists of LPU, price lists of distribution companies, sets of quality of life questionnaires), allowing students to master the skills and abilities, provided by professional activity, individually.

2. Simulation center "Educational pharmacy", equipped with simulation technics, which imitates the activity of pharmacy and its subdivisions (acceptance of goods, storage of goods, dispensing, pharmaceutical expertise of receipt) in the amount that allows students to master skills, provided by professional activity individually.

3. Rooms for students' independent work, equipped with computers with the ability to connect to the Internet and access to the electronic information and educational environment of the University.

### 9.2. List of equipment for classroom activities for the discipline

1. Multimedia complex (laptop, projector, screen, TV)

2. Computer class (15 computers) with installed applications and Internet access.

### 9.3. List of software

1. Online event platform "Webinar"

2. Yandex Browser

3. Reference system "Consultant Plus"

### 9.3. A set of licensed and freely distributed software, including domestic production

Item no.	Software	number of licenses	Type of software	Manufacturer	Number in the unified register of Russian software	Contract No. and date
1	Wtware	100	Thin Client Operating System	Kovalev Andrey Alexandrovich	1960	2471/05-18 from 28.05.2018
2	MyOffice is Standard. A corporate user license for educational organizations, with no expiration date, with the right to receive updates for 1 year.	220	Office Application	LLC "NEW CLOUD TECHNOLOGIES"	283	without limitation, with the right to receive updates for 1 year.
3	LibreOffice		Office Application	The Document Foundation	Freely distributed software	
4	Windows 10 Education	700	Operating systems	Microsoft	Azure Dev Tools for Teaching Subscription	
5	Yandex. Browser		Browser	«Yandex»	3722	
6	Subscription to MS Office Pro for 170 PCs for FGBOU VO "PIMU" of the Ministry of Health of Russia	170	Office Application	Microsoft		23618/HN100 30 LLC "Softline Trade" from 04.12.2020

### 10. List of changes to the working program (to be filled out by the template)

Federal State Budgetary Educational Institution of Higher Education  
 "Privolzhsky Research Medical University"  
 Ministry of Health of the Russian Federation  
 (FSBEI HE "PRMU" of the Ministry of Health of Russia)

Department of  
*Name of the department*

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**CHANGE REGISTRATION SHEET**

working program for the academic discipline  
***NAME OF THE ACADEMIC DISCIPLINE***

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Field of study / specialty / scientific specialty: \_\_\_\_\_  
(code, name)

Training profile: \_\_\_\_\_  
(name) - for master's degree programs

Mode of study: \_\_\_\_\_  
*full-time/mixed attendance mode/extramural*

Position	Number and name of the program section	Contents of the changes made	Effective date of the changes	Contributor's signature
1				

Approved at the department meeting  
Protocol No. \_\_\_\_\_ of \_\_\_\_\_ 20\_\_

Head of the Department

\_\_\_\_\_  
department name, academic title                      signature                      /                      print name