

*Summary of the working program of the academic discipline*

**«PHARMACEUTICAL CONSULTING AND INFORMING»**

General Educational Program of higher education (specialist's degree programs): 33.05.01  
Pharmacy

Department: *Management and Economics of Pharmacy and Pharmaceutical Technology*

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

- universal competencies (UC-4 (4.1));
- general professional competencies (GPC-2, GPC-4, GPC-6 (6.1, 6.2, 6.4));
- professional competencies (PC-3, PC-8 (8.4), PC-9 (9.2)).

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

**2.1.** The discipline refers to the core part of Block 1 of GEP HE (B1.C.39).

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

Mastering the discipline aims at acquiring the following universal (UC) 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-4	Able to apply modern communication technologies including in a foreign language(s), for academic and professional interaction	UC-4.1. Establishes and develops professional contacts in accordance with the needs of joint activities, including the exchange of information and the development of unified interaction strategy	<ul style="list-style-type: none"> <li>– methods and means of informing consumers;</li> <li>– formats and forms of information events for medical workers and the population;</li> <li>– fundamentals of business communication and culture, professional psychology, ethics and deontology;</li> <li>– features of the psychotype of the consumer: age and other personality traits;</li> <li>– the specifics of the relationship "doctor-pharmacist-</li> </ul>	<ul style="list-style-type: none"> <li>– analyze and plan information and consulting work;</li> <li>– carry out oral and written communications in communication with colleagues, consumers and suppliers;</li> <li>– build communication with consumers of medicines, taking into account the psychological state and personal characteristics;</li> <li>– recognize conditions, complaints that require access to a medical specialist;</li> <li>– provide</li> </ul>	<ul style="list-style-type: none"> <li>– skills in compliance with the rules of pharmaceutical ethics and deontology in relations with consumers of pharmacy products, their relatives and medical personnel of medical organizations;</li> <li>– skills of pharmaceutical consulting and informing consumers of pharmacy products;</li> <li>– skills in advising on drug groups and synonyms within the same international non-</li> </ul>

				<p>consumer of medicines";</p> <ul style="list-style-type: none"> <li>– moral and ethical principles relating to the professional activities of a pharmaceutical specialist.</li> </ul>	<p>information and advisory assistance in the selection of effective and safe drugs, taking into account the peculiarities of individual dosing.</p>	<p>proprietary name and their prices.</p>
2.	GPC-2	<p>Able to apply knowledge about morphofunctional features, physiological conditions and pathological processes in the human body to solve professional tasks</p>	<p>GPC-2.1. Analyzes the pharmacokinetics and pharmacodynamics of medicines based on knowledge about morphofunctional features, physiological conditions and pathological processes in the human body</p> <p>GPC-2.2. Explains the main and side effects of drugs, the effects of their combined use and interaction with food, taking into account morphofunctional features, physiological conditions and pathological processes in the human body</p> <p>GPC-2.3. Takes into account morphofunctional features, physiological conditions and pathological processes in the human body when choosing non-prescription medicinal products and other pharmacy products</p>	<ul style="list-style-type: none"> <li>– methods of searching and evaluating pharmaceutical information, including in resources with information on rejected drugs and other TAAs;</li> <li>– principles of pharmacotherapy, taking into account pharmacokinetics and pharmacodynamics of drugs;</li> <li>– basic anatomical and physiological concepts and terms used in medicine;</li> <li>– physiological characteristics of the body in different periods of life (childhood and old age, pregnancy, etc.);</li> <li>– general pharmacokinetic and pharmacodynamic patterns of drugs and features of the action of drugs in healthy individuals and in pathology, types of interaction, features of pharmacotherapy in newborns and the elderly, pregnant women;</li> </ul>	<ul style="list-style-type: none"> <li>– recognize conditions, complaints that require access to a medical specialist;</li> <li>– assess violations of the main functional indicators of human vital activity in pathology, identify the main risk factors for a particular disease;</li> <li>– be guided in the indications and contraindications for the appointment of drugs for the treatment of the most common diseases;</li> <li>– provide information and advisory assistance in the selection of effective and safe drugs, taking into account the peculiarities of individual dosing;</li> <li>– carry out the optimal choice of the dosage form, dose, multiplicity, duration and route of administration of the drug for the treatment of the</li> </ul>	<ul style="list-style-type: none"> <li>– skills of pharmaceutical consulting and informing consumers of pharmacy products;</li> <li>– skills in advising on groups of medicinal products and synonyms within the same international non-proprietary name and their prices;</li> <li>– skills of rational replacement of the prescribed medicinal product with synonymous or similar drugs in accordance with the established procedure;</li> <li>– skills in explaining to consumers of medicines the rules for taking and dosing regimen of medicines, their storage at home;</li> <li>– skills in providing advice on the rules for the operation of medical devices at home;</li> <li>– skills in providing information and consulting assistance in the</li> </ul>

				<ul style="list-style-type: none"> <li>– belonging of drugs to certain pharmacological groups;</li> <li>– the most important side and toxic effects, the main indications and contraindications to the use of drugs;</li> <li>– the basic principles of the clinical and pharmacological approach to the choice of drugs for pharmacotherapy of major diseases.</li> </ul>	<p>most common symptoms, elimination of adverse reactions;</p> <ul style="list-style-type: none"> <li>– take into account the peculiarities of the interaction of the drug with other drugs, with food;</li> <li>– use the necessary medical and pharmacological Latin terminology;</li> <li>– inform the consumer about the storage conditions of medicines at home.</li> </ul>	<p>selection of over-the-counter medicines and other pharmacy products;</p> <ul style="list-style-type: none"> <li>– skills in providing advice on the use and compatibility of drugs, their interaction with food.</li> </ul>
3.	GPC-4	Able to carry out professional activities in accordance with ethical norms and moral principles of pharmaceutical ethics and deontology	<p>GPC-4.1. Carries out the interaction in the system "pharmaceutical worker-visitor of a pharmacy organization" in accordance with the norms of pharmaceutical ethics and deontology</p> <p>GPC-4.2. Carries out the interaction in the system "pharmaceutical worker-medical worker" in accordance with the norms of pharmaceutical ethics and deontology</p>	<ul style="list-style-type: none"> <li>– provisions of regulatory legal acts regulating the circulation of drugs and other TAAs;</li> <li>– fundamentals of business communication and culture, professional psychology, ethics and deontology;</li> <li>– features of the psychotype of the consumer: age and other personality traits;</li> <li>– the specifics of the relationship "doctor-pharmacist-consumer of medicines";</li> <li>– moral and ethical principles relating to the professional activities of a pharmaceutical specialist.</li> </ul>	<ul style="list-style-type: none"> <li>– carry out oral and written communications in communication with colleagues, consumers and suppliers;</li> <li>– build communication with consumers of medicines, taking into account the psychological state and personal characteristics.</li> </ul>	<ul style="list-style-type: none"> <li>– skills in compliance with the rules of pharmaceutical ethics and deontology in relations with consumers of pharmacy products, their relatives and medical personnel of medical organizations;</li> <li>– skills of pharmaceutical consulting and informing consumers of pharmacy products.</li> </ul>
4.	GPC-6	Able to	GPC-6.1. Applies	– methods of	– analyze and	– skills in the

		understand the principles of modern information technologies and use them to solve the tasks of professional activity	modern information technologies in the interaction with parties to the circulation of medicinal products taking into account the requirements of information security 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 GPC-6.4. Applies automated information systems in the internal processes of the pharmaceutical organization, as well as for interactions with customers and suppliers	searching and evaluating pharmaceutical information, including in resources with information on rejected drugs and other TAAs; <ul style="list-style-type: none"> <li>– methods and means of informing consumers;</li> <li>– formats and forms of information events for medical workers and the population.</li> </ul>	plan information and consulting work; <ul style="list-style-type: none"> <li>– organize awareness-raising activities for health workers and the public;</li> <li>– organize and ensure the document flow of a pharmaceutical organization, including any types of reporting, in accordance with legislative and regulatory acts.</li> </ul>	search and use of regulatory and reference information regulating the circulation of medicines. <ul style="list-style-type: none"> <li>–</li> </ul>
5.	PC-3	Able to carry out pharmaceutical information and consulting during the release and sale of medicines for medical use and other products of the pharmacy assortment, including with the use of medical and pharmaceutical information systems and databases	PC-3.1. Provides information and consulting assistance to visitors of a pharmacy organization when choosing medicines and other products of the pharmacy assortment, as well as on questions of their rational use PC-3.2. Informs medical professionals about medicines, their synonyms and analogues, possible side effects and interactions PC-3.3. Decides on the replacement of the prescribed drug with synonymous or similar drugs in the prescribed manner based on information	– provisions of regulatory legal acts regulating the circulation of drugs and other TAAs; <ul style="list-style-type: none"> <li>– current range of drugs and other TAAs for various pharmacological groups, their characteristics, active substances (international non-proprietary names);</li> <li>– methods of searching and evaluating pharmaceutical information, including in resources with information on rejected drugs and other TAAs;</li> </ul>	– use the current regulatory framework regulating medical and pharmaceutical activities, circulation of medicines, including narcotic drugs, psychotropic substances and medicines subject to subject-quantitative accounting; <ul style="list-style-type: none"> <li>– recognize conditions, complaints that require access to a medical specialist;</li> <li>– assess violations of the main functional indicators of</li> </ul>	– skills in the search and use of regulatory and reference information regulating the circulation of medicines; <ul style="list-style-type: none"> <li>– basic medical and pharmaceutical terminology;</li> <li>– skills of pharmaceutical consulting and informing consumers of pharmacy products;</li> <li>– skills in advising on groups of medicinal products and synonyms within the same international non-</li> </ul>

			<p>about groups of drugs and synonyms within the same international nonproprietary name and prices for them PC-3.4. Uses medical and pharmaceutical information systems and databases in the implementation of pharmaceutical informing and consulting during the release and sale of medicines for medical use and other pharmacy products</p>	<ul style="list-style-type: none"> <li>– principles of pharmacotherapy, taking into account pharmacokinetics and pharmacodynamics of drugs;</li> <li>– a list of vital and essential drugs, a list of goods allowed for sale in pharmacy organizations along with LP;</li> <li>– methods and means of informing consumers;</li> <li>– formats and forms of information events for medical workers and the population;</li> <li>– methods of pharmaceutical consulting,</li> <li>– belonging of drugs to certain pharmacological groups;</li> <li>– the most important side and toxic effects, the main indications and contraindications to the use of drugs;</li> <li>– the basic principles of the clinical and pharmacological approach to the choice of drugs for pharmacotherapy of major diseases.</li> </ul>	<p>human vital activity in pathology, identify the main risk factors for a particular disease;</p> <ul style="list-style-type: none"> <li>– be guided in the indications and contraindications for the appointment of drugs for the treatment of the most common diseases;</li> <li>– provide information and advisory assistance in the selection of effective and safe drugs, taking into account the peculiarities of individual dosing;</li> <li>– carry out the optimal choice of dosage form, dose, multiplicity, duration and route of administration of the drug;</li> <li>– a drug to treat the most common symptoms, eliminate adverse reactions;</li> <li>– take into account the peculiarities of the interaction of the drug with other drugs, with food;</li> <li>– use the necessary medical and pharmacological Latin terminology;</li> <li>– inform the consumer about</li> </ul>	<p>proprietary name and their prices;</p> <ul style="list-style-type: none"> <li>– skills of rational replacement of the prescribed medicinal product with synonymous or similar drugs in accordance with the established procedure;</li> <li>– skills in explaining to consumers of medicines the rules for taking and dosing regimen of medicines, their storage at home;</li> <li>– skills in providing advice on the rules for the operation of medical devices at home;</li> <li>– skills in providing information and consulting assistance in the selection of over-the-counter medicines and other pharmacy products;</li> <li>– skills in providing advice on the use and compatibility of drugs, their interaction with food.</li> </ul>
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					the storage conditions of medicines at home.	
6.	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	PC-8.4. Informs individuals and employees of the veterinary service about veterinary medicines: their rational use, possible side effects, providing at the same time, the necessary consulting assistance	<ul style="list-style-type: none"> <li>– methods of searching and evaluating pharmaceutical information, including in resources with information on rejected drugs and other TAAs;</li> <li>– principles of pharmacotherapy, taking into account pharmacokinetics and pharmacodynamics of drugs;</li> <li>– a list of vital and essential drugs, a list of goods allowed for sale in pharmacy organizations along with LP;</li> <li>– methods and means of informing consumers;</li> <li>– formats and forms of information events for medical workers and the population;</li> <li>– methods of pharmaceutical consulting,</li> <li>– basic anatomical and physiological concepts and terms used in medicine;</li> <li>– physiological characteristics of the body in different periods of life (childhood and old age, pregnancy, etc.);</li> </ul>	<ul style="list-style-type: none"> <li>– analyze and plan information and consulting work;</li> <li>– organize awareness-raising activities for health workers and the public;</li> <li>– carry out oral and written communications in communication with colleagues, consumers and suppliers;</li> <li>– build communication with consumers of medicines, taking into account the psychological state and personal characteristics;</li> <li>– recognize conditions, complaints that require access to a medical specialist;</li> <li>– assess violations of the main functional indicators of human vital activity in pathology, identify the main risk factors for a particular disease;</li> <li>– be guided in the indications and contraindications for the appointment of drugs for the treatment of the most common diseases;</li> </ul>	<ul style="list-style-type: none"> <li>– skills in the search and use of regulatory and reference information regulating the circulation of medicines;</li> <li>– basic medical and pharmaceutical terminology;</li> <li>– skills in compliance with the rules of pharmaceutical ethics and deontology in relations with consumers of pharmacy products, their relatives and medical personnel of medical organizations;</li> <li>– skills of pharmaceutical consulting and informing consumers of pharmacy products;</li> <li>– skills in advising on groups of medicinal products and synonyms within the same international non-proprietary name and their prices;</li> <li>– skills of rational replacement of the prescribed medicinal product with synonymous or similar drugs in accordance with the</li> </ul>

				<ul style="list-style-type: none"> <li>– general pharmacokinetic and pharmacodynamic patterns of drugs and features of the action of drugs in healthy individuals and in pathology, types of interaction, features of pharmacotherapy in newborns and the elderly, pregnant women;</li> <li>– belonging of drugs to certain pharmacological groups;</li> <li>– the most important side and toxic effects, the main indications and contraindications to the use of drugs;</li> <li>– the basic principles of the clinical and pharmacological approach to the choice of drugs for pharmacotherapy of major diseases.</li> </ul>	<ul style="list-style-type: none"> <li>– provide information and advisory assistance in the selection of effective and safe drugs, taking into account the peculiarities of individual dosing;</li> <li>– carry out the optimal choice of dosage form, dose, multiplicity, duration and route of administration of the drug;</li> <li>– a drug to treat the most common symptoms, eliminate adverse reactions;</li> <li>– take into account the peculiarities of the interaction of the drug with other drugs, with food;</li> <li>– use the necessary medical and pharmacological Latin terminology;</li> <li>– inform the consumer about the storage conditions of medicines at home.</li> </ul>	<p>established procedure;</p> <ul style="list-style-type: none"> <li>– skills in explaining to consumers of medicines the rules for taking and dosing regimen of medicines, their storage at home;</li> <li>– skills in providing advice on the rules for the operation of medical devices at home;</li> <li>– skills in providing information and consulting assistance in the selection of over-the-counter medicines and other pharmacy products;</li> <li>– skills in providing advice on the use and compatibility of drugs, their interaction with food.</li> </ul>
7.	PC-9	Able to solve tasks of professional activities in the transfer of medicines through pharmaceutical and medical organization	PC-9.2. Performs pharmaceutical information and consulting during the sale, release and transfer of medicines for medical use	<ul style="list-style-type: none"> <li>– current range of drugs and other TAAs for various pharmacological groups, their characteristics, active substances (international non-proprietary names);</li> <li>– methods of</li> </ul>	<ul style="list-style-type: none"> <li>– analyze and plan information and consulting work;</li> <li>– organize awareness-raising activities for health workers and the public;</li> <li>– carry out oral and written communications</li> </ul>	<ul style="list-style-type: none"> <li>– skills in the search and use of regulatory and reference information regulating the circulation of medicines;</li> <li>– basic medical and pharmaceutical terminology;</li> </ul>

		s		<p>searching and evaluating pharmaceutical information, including in resources with information on rejected drugs and other TAAs;</p> <ul style="list-style-type: none"> <li>– principles of pharmacotherapy, taking into account pharmacokinetics and pharmacodynamics of drugs;</li> <li>– a list of vital and essential drugs, a list of goods allowed for sale in pharmacy organizations along with LP;</li> <li>– methods and means of informing consumers;</li> <li>– formats and forms of information events for medical workers and the population;</li> <li>– fundamentals of business communication and culture, professional psychology, ethics and deontology;</li> <li>– methods of pharmaceutical consulting,</li> <li>– physiological characteristics of the body in different periods of life (childhood and old age, pregnancy, etc.);</li> <li>– general pharmacokinetic and pharmacodynamic</li> </ul>	<p>in communication with colleagues, consumers and suppliers;</p> <ul style="list-style-type: none"> <li>– establish communication with consumers of medicines, taking into account the psychological state and personal characteristics;</li> <li>– use the current regulatory framework regulating medical and pharmaceutical activities, circulation of medicines, including narcotic drugs, psychotropic substances and medicines subject to subject-quantitative accounting;</li> <li>– recognize conditions, complaints that require access to a medical specialist;</li> <li>– assess violations of the main functional indicators of human vital activity in pathology, identify the main risk factors for a particular disease;</li> <li>– be guided in the indications and contraindications for the appointment of drugs for the treatment of the most common</li> </ul>	<ul style="list-style-type: none"> <li>– skills in compliance with the rules of pharmaceutical ethics and deontology in relations with consumers of pharmacy products, their relatives and medical personnel of medical organizations;</li> <li>– skills of pharmaceutical consulting and informing consumers of pharmacy products;</li> <li>– skills in advising on groups of medicinal products and synonyms within the same international non-proprietary name and their prices;</li> <li>– skills of rational replacement of the prescribed medicinal product with synonymous or similar drugs in accordance with the established procedure;</li> <li>– skills in explaining to consumers of medicines the rules for taking and dosing regimen of medicines, their storage at home;</li> <li>– skills in providing advice on the rules for the operation of medical devices</li> </ul>
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				<p>c patterns of drugs and features of the action of drugs in healthy individuals and in pathology, types of interaction, features of pharmacotherapy in newborns and the elderly, pregnant women;</p> <ul style="list-style-type: none"> <li>– belonging of drugs to certain pharmacological groups;</li> <li>– the most important side and toxic effects, the main indications and contraindications to the use of drugs;</li> <li>– the basic principles of the clinical and pharmacological approach to the choice of drugs for pharmacotherapy of major diseases.</li> </ul>	<p>diseases;</p> <ul style="list-style-type: none"> <li>– provide information and advisory assistance in the selection of effective and safe drugs, taking into account the peculiarities of individual dosing;</li> <li>– carry out the optimal choice of dosage form, dose, multiplicity, duration and route of administration of the drug;</li> <li>– a drug to treat the most common symptoms, eliminate adverse reactions;</li> <li>– take into account the peculiarities of the interaction of the drug with other drugs, with food;</li> <li>– use the necessary medical and pharmacological Latin terminology;</li> <li>– inform the consumer about the storage conditions of medicines at home.</li> </ul>	<p>at home;</p> <ul style="list-style-type: none"> <li>– skills in providing information and consulting assistance in the selection of over-the-counter medicines and other pharmacy products;</li> <li>– skills in providing advice on the use and compatibility of drugs, their interaction with food.</li> <li>–</li> </ul>
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#### 4. 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)	
Classroom work, including	0,61	22	22
Lectures (L)	0,17	6	6
Laboratory practicum (LP)*	Laboratory practicums are not stipulated		
Practicals (P)	0,44	16	16

Seminars (S)	Seminars are not stipulated		
Student's individual work (SIW)	0,39	14	14
Mid-term assessment			
credit/exam ( <i>specify the type</i> )			credit
TOTAL LABOR INTENSITY	1	36	1

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

No	Competence code	Section name of the discipline	The content of the section in teaching units
1	UC-4 GPC-2 GPC-4 GPC-6 PC-3 PC-8 PC-9	Pharmaceutical consulting and informing	<p>The role of the pharmaceutical worker in the health care system. The concept of pharmaceutical assistance to the population.</p> <p>Pharmaceutical consulting and information as mandatory components of pharmaceutical assistance to the population.</p> <p>Regulatory and legal regulation and comparison of the concepts of pharmaceutical consulting and information.</p> <p>Professional standard "Pharmacist" and rules of good pharmacy practice.</p> <p>Algorithm for building a professional pharmaceutical consultation.</p> <p>Pharmaceutical consulting and information on the substitution of medicines and pharmacy products.</p> <p>The concept of responsible self-medication. The role of the doctor in the process of pharmaceutical counseling. Types of pharmaceutical consulting.</p> <p>Consumer misconceptions and objections in the process of pharmaceutical consulting. The concept of unfair advertising.</p> <p>Communication skills in the process of pharmaceutical consulting and information. Standards of communication.</p> <p>Methods of identifying the needs of the consumer and his expectations from the LP. Selection of the most effective LP within a certain price segment.</p> <p>The most popular among visitors of pharmacy organizations are pharmacotherapeutic groups, over-the-counter drugs and sales leaders.</p> <p>Pharmaceutical advice on the release of drugs for the treatment of gastrointestinal diseases, LP from the group of NSAIDs, antipyretic and anti-cold drugs, over-the-counter drugs for the treatment of rhinitis, sinusitis and sore throat.</p> <p>The concept of complex recommendations and additional sales. Marketing pressure of pharmaceutical manufacturers: pros and cons.</p> <p>Features of pharmaceutical consulting in the release of prescription drugs.</p> <p>Assessment of the interaction of LP, risk assessment. Use of the information provided in the instructions on the LP.</p>