Ministry of Education and Science of the Kyrgyz Republic
Ministry of Health of the Kyrgyz Republic
Kyrgyz State Medical Academy named after I.K. Akhunbayev

COMPETENCIES CATALOG
Higher education institution graduate with specialty 560005 "Pharmacy"
PRE-GRADUATE LEVEL
Duration of study: 5 years

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EXPLANATORY NOTE

Pre-graduate training in the specialty "Pharmacy" provides professional training for a pharmacist with deep theoretical and practical knowledge and ready to carry out professional activities.

The concept of pharmaceutical practice has changed in recent years. Now it should include not only pharmaceutical activities, but also study the needs of patients in drug provision and this should be taken into account when preparing future pharmacists.

WHO and the International Pharmaceutical Federation have developed a draft standard "Good Practice in Pharmaceutical Education" (GPEP), which notes that pharmaceutical specialists carry out their activities in various fields in response to the dynamic development of public health priorities and needs at the local, national, regional and international levels.

In this regard, it is necessary to realize the role of a pharmacist through regulation and constant updating of training programs. In this regard, educational plans and training programs for pharmaceutical specialists should be in accordance with the requirements of practical pharmacy. The main goal of pharmacist training should be aimed at achieving professional qualities and ethics in order to increase the responsibility of pharmacists for the use of medicines, their discovery, development, production and distribution, as well as ensuring effective access to high-quality, effective and safe medicines.

In addition, a competency-based approach should be introduced in the training of pharmacists, taking into account increased information accessibility, automation, the introduction of new forms of work, and the development of skills in finding and using information necessary to meet the medicinal needs of patients.

The challenges of our time require an expansion of the range of pharmacists' activities, which entails the need for changes in competencies in the training of pharmacists with a focus on patients, providing high-quality human-oriented pharmaceutical care to improve health outcomes for both individuals and the general population.

When developing the competence catalog, the recommendations of the World Health Organization (WHO), recommendations, reports, reports of the International Pharmaceutical Federation (FIP) on the development of pharmaceutical sciences and education in the context of improving professional training, the experience of foreign countries, neighboring countries (Russian Federation, Republic of Kazakhstan) were used, Resolution of the Government of the Kyrgyz Republic dated December 20, 2018 No. 600 "On the Program of the Government of the Kyrgyz Republic for the protection of public health and the development of the healthcare system for 2019-2030 "A healthy person is a prosperous country", Order of the Ministry of Health of the Kyrgyz Republic No. 985 dated 07/21/2021 "On the approval of professional standards in the specialty "Pharmacy" and other regulatory documents regulating activities in the field of circulation of medicines of the Kyrgyz Republic.

In connection with the above, this catalog of competencies in the specialty "Pharmacy" has been developed, which should become part of the regulatory documents for pre-graduate training of pharmacists, further development of educational programs, plans and revision of the professional standard in this specialty.

The areas of professional activity of a graduate who has mastered the specialty program are:

- healthcare (in the field of circulation of medicines, medical devices and other pharmacy products),
- administrative and managerial (in the field of circulation of medicines),
- Education and science (in the field of scientific research),
- Other areas of activity related to health protection.

According to the provisions of the regulatory documents of the Kyrgyz Republic regulating activities in the field of circulation of medicines, a pharmacist with higher education can carry out pharmaceutical activities in the areas (types of activities):

- organizational and managerial;

• control and authorization;
• production;
• storage and sale of medicines, medical devices and other pharmacy products;
• Marketing;
• Information and advisory and educational;
• Chemical and toxicological;
• Scientific research;
• Education and self-development.

GRADUATE COMPETENCIES

The graduate's competencies characterize his potential ability to use the acquired knowledge, skills, and practical experience in professional and social activities.

In the catalog, competencies are divided into two groups: universal (general, instrumental, socio-personal) and professional. They must be mastered by a graduate in accordance with the requirements of the State Educational Standard of higher professional education in the specialty "Pharmacy".

-Universal competencies reflect the demands of society and the individual for the general cultural, socio-personal qualities of the graduate, knowledge and ability to apply instrumental competencies upon completion of the higher education program of the appropriate level.

- Professional competencies reflect the demands of the labor market in terms of the willingness of a graduate of a higher education program to perform the tasks of professional activity and related labor functions from professional standards for the appropriate level of professional qualification.

The results of mastering the specialty program are determined by the competencies acquired by the graduate, i.e. his ability to apply knowledge, skills and personal qualities in accordance with the tasks of professional activity.

During the formation of competencies, the graduate's labor actions, the knowledge and skills necessary for this were taken into account. This catalog defines the tasks corresponding to the listed areas of activity. The lists of competencies are determined on the basis of normative legal documents defining legislation on the development of the national qualifications system:

-The concept of the National Qualifications System, 30.09.2019;

-The National Qualifications Framework, 09/18/2020;

-Methodology for the development of the Sectoral Qualifications Framework, 07/15/2021; Methodology for the development of professional standards, 07/15/2021, Order of the Ministry of Health of the Kyrgyz Republic No. 985 of 07/21/2021 "On the approval of professional standards in the specialty "Pharmacy".

Based on this catalog of competencies:

-*the following are determined:*

• the purpose and content of pre-graduate training of a pharmacist;

• the level of competence, knowledge and skills of the pharmacist;

-*being developed:*

• Pharmacist training work programs;

• criteria for assessing the quality of student training;

• typical requirements for the certification of pharmacists;

• standards of professional activity of pharmacists;

- *organized*

• the learning process;

• professional orientation of applicants to medical universities at the Faculty of Pharmacy;

- *it is being carried out*

• certification of graduates.

For practical convenience, the competencies in the catalog are distributed as follows:

Chapter 1. Common tasks

Chapter 2. Pharmaceutical disciplinary tasks.

Chapter 3. Professional skills and abilities

Chapter 1 "General tasks" lists the universal and professional competencies that a graduate must master (in accordance with the State Educational Standard of Higher Professional Education in the specialty 560005 "Pharmacy").

Chapter 2 "Disciplinary tasks", presents tasks in specialized disciplines (knowledge, skills and personal competencies):

Pharmacy Management and Economics
Technology of medicines
Pharmacognosy
Pharmaceutical chemistry
Pharmacology

	Level 1	**Level 2**
Disciplinary tasks	*The graduate is able and ready to independently:* *– **identify** the problem and analyze it;* *- **make** a professional action plan;* *– **to carry** out the necessary organizational, managerial, analytical, technological, and advisory activities in organizations related to the circulation of medicines and medical devices;*	*The graduate is capable and ready:* *- **reproduce** and explain the educational material with the required degree of accuracy and completeness;* *- **to carry** out the necessary organizational, managerial, analytical, technological, and advisory activities in organizations related to the circulation of medicines and medical devices.*

Chapter 3, "Professional skills" lists the skills that a graduate should be familiar with and/or possess to some extent.

To describe the degree of proficiency in a skill that a graduate should possess, the following level gradation is used:

Level 1	**Level 2**
a graduate can independently or has sufficient experience, skill or knowledge to carry out certain actions in the field of pharmaceutical activity in order to solve professional tasks	the graduate is guided in matters of professional activity, can perform certain functions, actions on a dummy / simulator or under the supervision of a mentor

CHAPTER 1. GENERAL TASKS

THE GENERAL TASKS ARE FORMULATED IN THE FORM OF UNIVERSAL AND PROFESSIONAL COMPETENCIES. PROFESSIONAL COMPETENCIES ARE DISTRIBUTED ACCORDING TO THE TYPES OF PHARMACIST'S ACTIVITIES.

1. General scientific competencies	
GC-1	is able and ready to analyze socially significant problems and processes,
GC-2	to use the methods of natural sciences, mathematics and humanities in various types of professional and social activities
GC-3	is able and ready to analyze significant political events and trends, to
GC-4	master the basic concepts and patterns of the world historical process, to respect and respect historical heritage and traditions, to assess state policy, for the formation of a civic position
2. Instrumental competencies	
IC-1	is capable and ready to work with computer equipment and software for system and applied purposes to solve professional tasks
IC -2	is capable and ready to use information, bibliographic resources and information and communication technologies, taking into account the basic requirements of information security
IC -3	, is capable and ready for written and oral communication in the state language and official languages, is able to master one of the foreign languages for
IC -4	able and ready to use management methods to solve professional problems; organize work
3. **3. Socio-personal and general cultural competencies**	
SPC-1	capable and ready to implement ethical, deontological and bioethical principles in professional activity
SPC -2	capable and ready to master the techniques of professional communication; build interpersonal relationships, work in a group, constructively resolve conflict situations, tolerate social, ethnic, confessional and cultural differences
SPC -3	capable and ready for continuous professional development, self-knowledge,
SPC -4	self-development, self-actualization; manage your time, plan and organize your activities, build a strategy for personal and professional development and training
SPC -5	is able and ready to carry out your activities taking into account the moral and legal norms accepted in society, comply with laws and regulations on working with confidential information, bear social and ethical responsibility for decisions
1.1. Professional competencies	
General professional and communicative competencies:	
PC-1	Capable and ready to assess morphofunctional, physiological conditions, pathophysiological processes in the human body, identify clinical syndromes of socially significant and most common diseases and urgent conditions for solving professional tasks;
PC -2	Capable and ready to use specialized equipment and medical devices intended for use in the professional field;
PC -3	He is capable and ready to communicate and cooperate with healthcare professionals, staff of pharmaceutical organizations, representatives of other professions to solve professional problems;
PC -4	Is able and willing to communicate with patients and their family members, other pharmacists, doctors, nurses and other health professionals on health issues;
PC -5	Capable and ready to understand patients, taking into account the cultural, religious

	and social environment of the residents, to determine the needs of residents in healthcare;
PC -6	Is capable and ready to analyze complaints from consumers of medicines in order to detect undesirable side effects within the framework of pharmacovigilance procedures;
PC -7	Is able and willing to work in partnership with patient organizations to bring pharmaceutical care services in line with patient needs;
PC -8	Is capable and ready to use limited healthcare resources responsibly, reducing the irrational use of medicines;
Pharmaceutical activities:	
PC -9	Is capable and ready to participate in the implementation of the main provisions of the State Drug Policy of the Kyrgyz Republic;
PC -10	Capable and ready to implement the basic principles of rational use of medicines and medical devices
PC -11	Is capable and ready to participate in the development and improvement of medicines, their production, examination, registration, preclinical, clinical trials in accordance with the requirements of national and international standards (GLP, GCP, GMP, GDP, etc.);
PC -12	He is able and ready to use the basics of economic and legal knowledge in his professional activities;
PC -13	He is capable and ready to carry out wholesale and retail sales of medicines, participate in the organization of supplies of medicines and medical devices, taking into account logistical rules;
PC -14	Capable and ready to ensure the storage of medicines and medical devices;
PC -15	Capable and ready to carry out the transportation of medicines, taking into account the principles of transport logistics and compliance with the requirements of the cold chain;
PC -16	Is able and ready to participate in the procedures for the import of medicines into the Kyrgyz Republic and the export of medicines from the Kyrgyz Republic;
PC -17	He is able and ready to find reliable information to achieve optimal price-effectiveness ratios of medicines and medical devices of appropriate quality and required quantity;
PC -18	Capable and ready to participate in the purchase, taking into account the optimal price and efficiency ratios of drugs and medical devices of appropriate quality and required quantity;
PC -19	Is able and ready to participate in the implementation of state programs of preferential drug provision at the outpatient and inpatient levels;
PC -20	Is capable and ready to provide information and advisory assistance to healthcare professionals and drug users on the safe and proper use of medicines and medical devices;
PC -21	He is capable and ready to carry out sanitary and educational work and to motivate the population to promote health, prevent diseases, and lead a healthy lifestyle;
Organizational and managerial activities	
PC -22	He is capable and ready to participate in the organization of activities of pharmaceutical organizations, including occupational health and safety, prevention of occupational diseases, control of compliance and environmental safety;
PC -23	Is capable and ready to apply the basic principles of management in the pharmaceutical industry, including in pharmaceutical organizations and their structural divisions;
PC -24	He is capable and ready to organize quality control of medicines in the conditions of pharmaceutical organizations;
PC -25	He is capable and ready to lead and manage a team during cooperation with representatives of other professions.
Control and licensing activities:	

PC -26	Is able and ready to carry out licensing procedures for pharmaceutical activities (production, manufacture and sale of medicines and medical devices), in accordance with regulatory and legal documentation;
PC -27	Is capable and ready to participate in quality control of medicines during their circulation on the market, including control in the process of their improvement and monitoring of undesirable effects;
PC -28	Is capable and ready to carry out the examination of medicines using chemical, biological, physico-chemical and other methods of analysis;
PC -29	Is able and willing to evaluate the main effects, interactions and side effects of drugs, as well as their combinations with the patient's diet, in order to take appropriate measures in cooperation with doctors, nurses and other medical professionals;
PC -30	Able and ready to evaluate the quality of medicinal plant raw materials (plant organs used, histological structure, chemical composition of active and other groups of biologically active substances);
PC -31	It is capable and ready to recognize medicinal plants and impurities of foreign plants in a live and herbalized form during the collection, acceptance and analysis of medicinal plant raw materials.
PC -32	Is capable and ready to carry out quality control of medicines in the conditions of pharmaceutical organizations;
PC -33	Is capable and ready to take measures for the timely detection of drugs that have become unusable, drugs with expired shelf life, falsified, counterfeit and substandard drugs, their withdrawal from circulation for further destruction in accordance with current legislation;
PC -34	He is capable and ready to participate in conducting chemical and toxicological research in order to diagnose acute poisoning with drugs, poisons, etc., narcotic and alcoholic intoxication;
Production activities:	
PC -35	Is capable and ready to implement technological processes in the production and manufacture of medicines in compliance with the requirements of international and national standards;
PC -36	Capable and ready to organize the procurement of medicinal plant raw materials, taking into account the rational use of medicinal plant resources;
Medical activities:	
PC -37	He is able and ready to take part in providing assistance to the population in emergency situations at the stages of evacuation, including in organizing the supply of medicines and medical devices;
PC -38	He is able and ready to use the techniques of first emergency first aid;
Research activities:	
PC -39	Capable and ready to analyze and publicly present scientific pharmaceutical information;
PC -40	Capable and ready to participate in the formulation of scientific tasks and their experimental implementation;
PC -41	He is able and ready to work with scientific literature, analyze information, conduct a search, turn what he has read into a means to solve professional problems (highlight the main provisions, consequences of them and suggestions).
PC -42	He is capable and ready for further education and self-development throughout his life.

CHAPTER 2. PHARMACEUTICAL DISCIPLINARY TASKS:

DISCIPLINARY TASKS	Level
2.1. Pharmacy Management and Economics	
The basic principles of a systematic approach, methods of critical analysis of problematic situations, rules for constructing theory and strategies of action; current socially significant problems and processes, methods of historical and scientific analysis in the field of medicine and pharmacy;	1
Basic concepts and categories of philosophy, theory of development and interaction of cultures, theory of conflictology, basic principles of interpersonal communication, basic concepts and patterns of the world historical process, features of the development of pharmacy medicine as a science and field of activity at various historical stages, the main stages, logic and patterns of development of medical thought and practice at various stages of human history;	1
The correlation of the concepts of social and ethical responsibility of a doctor and a pharmacist at different historical stages of the development of medicine, the historical evolution of ethical ideas about medical practice (euthanasia, abortion, surrogacy, genetic engineering, etc.), ethical standards of professional activity, deontology;	1
The specifics of the relationship "pharmacist-consumer of medicines and other pharmaceutical products"; moral and ethical norms and principles related to the professional activity of a pharmacist;	1
Basic regulatory legal acts; principles of operation of the system of regulatory regulation and state control of the circulation of medicines in the pharmaceutical market;	1
The basics of organizing pharmaceutical care for various groups of the population;	1
Participation in the development and improvement of medicines, their production, examination, registration, preclinical, clinical trials in accordance with the requirements of national and international standards (GLP, GCP, GMP, GDP, etc.);	2
Licensing of pharmaceutical activities (production, manufacture and sale of medicines and medical devices) in accordance with the regulatory framework documentation;	2
Organization of wholesale and retail sale of medicines, participation in the organization of supply of medicines and medicines, taking into account the logistical rules;	2
Taking measures to timely identify drugs that have become unusable, drugs with expired shelf life, falsified, counterfeit and substandard drugs and removing them from circulation	2
Basic principles of management in pharmaceutical organizations and their structural divisions	2
Organization of occupational health and safety, prevention of occupational diseases, control of compliance and environmental safety of pharmaceutical organizations	2
Organization of preferential drug provision at the outpatient and inpatient levels;	1
Organization of storage of medicines and medical devices;	2
Fundamentals of economic and legal knowledge in the professional activity of a pharmacist	1
Communication and cooperation with healthcare professionals, staff of pharmaceutical organizations, representatives of other professions to solve professional problems	1
2.2. Technology of medicines	
The device and principles of operation of modern laboratory analytical and technological, as well as production equipment. The main trends in the development of pharmaceutical technology, new directions in the creation of	1

modern dosage forms;	
Participation in the development and improvement of medicines, their production, examination, registration, preclinical, clinical trials in accordance with the requirements of national and international standards (GLP, GCP, GMP, GDP, etc.);	2
Implementation of technological processes in the production and manufacture of medicines in compliance with the requirements of international and national standards	1
Organization of production of medicines in industrial production conditions that meet GMP requirements	2
Methods of validation and risk analysis in the production of medicines	2
Organization of the manufacture of medicines in pharmacies, carrying out technological expertise of prescriptions and requirements of healthcare organizations	1
2.3. Pharmaceutical chemistry	
The device and principles of operation of modern laboratory analytical equipment. The main trends in the development of pharmaceutical analysis.	1
Methods for the detection of inorganic cations and anions, methods of separation of substances (chemical, chromatographic, extraction); Fundamentals of qualitative analysis of organic compounds; Features of the application of chromatographic and spectral methods for the detection of toxicants in objects;	1
Participation in the development and improvement of medicines, their production, examination, registration, preclinical, clinical trials in accordance with the requirements of national and international standards (GLP, GCP, GMP, GDP, etc.);	2
Organization and quality control of medicines in the conditions of pharmaceutical organizations, control and analytical laboratories	2
Examination of medicines using chemical, biological, physico-chemical and other methods of analysis	1
Identification of substandard, falsified, counterfeit, expired medicines	1
Conducting a chemical and toxicological study to diagnose acute poisoning with drugs, poisons, etc., narcotic and alcoholic intoxication	2
2.4. Pharmacognosy	
Organization and conduct of commodity research, pharmacognostic analysis of medicinal plant raw materials in the conditions of pharmaceutical organizations, control and analytical laboratories	2
Evaluation of the quality of medicinal plant raw materials (plant organs used, histological structure, chemical composition of active and other groups of biologically active substances);	1
Recognition of medicinal plants and impurities of foreign plants in live and herbalized form during the collection, acceptance and analysis of medicinal plant raw materials	1
Organization of procurement of medicinal plant raw materials, taking into account the rational use of medicinal plant resources;	1
2.5. Pharmacology	
Features of the organization of first aid in emergency situations of peacetime and wartime, modern ways to protect the population, patients, medical and pharmaceutical workers from the damaging factors of weapons of mass destruction, natural and man-made disasters;	1
Methods of providing first emergency first aid;	1
Morphofunctional features, physiological conditions in the body of a healthy person. Pathophysiological processes in the human body, identification of clinical syndromes of socially significant and most common diseases and urgent conditions for solving professional tasks;	1

The main mechanisms of adaptation and protection of a healthy body under the influence of environmental factors;	1
Communication with patients and their family members, doctors, nurses and other health professionals on health issues	1
Responsible use of limited health resources, reduction of irrational use of medicines;	2
Analysis of complaints from consumers of medicines in order to detect undesirable side effects within the framework of pharmacovigilance procedures;	2
Participation in the development and improvement of medicines, their production, examination, registration, preclinical, clinical trials in accordance with the requirements of national and international standards (GLP, GCP, GMP, GDP, etc.);	2
Sanitary and educational work and motivation of the population to promote health, prevent diseases, and lead a healthy lifestyle	1
Information and advisory assistance to healthcare professionals and drug users on the safe and proper use of medicines and medical devices;	1

Chapter 3. PROFESSIONAL SKILLS AND ABILITIES

SKILLS AND ABILITIES	Level
3.1. Organizational and managerial activities	
Uses e-health, information and communication technologies and health information systems to solve professional tasks	1
Develops a strategy for the organization and development of a pharmaceutical organization,	2
Organizes the selection of members of the pharmaceutical organization's team to achieve the set goal, assigning roles in the team	2
Plans and adjusts the work of the team taking into account the interests, behaviors and opinions of its members; distributes assignments and delegates authority to team members;	2
Resolves conflicts and contradictions in business communication based on consideration of the interests of all parties;	1
Organizes discussions on a given topic and discussion of the results of the team's work with the involvement of opponents to the developed ideas;	1
Establishes and develops professional contacts in accordance with the needs of joint activities, including the exchange of information and the development of a unified strategy for interaction;	2
Presents the results of academic and professional activities at various public events, including international ones, choosing the most appropriate format;	2
Builds social professional interaction taking into account the peculiarities of the main forms of scientific and religious consciousness, business and general culture of representatives of other ethnic groups and confessions, various social groups;	1
Adheres to the conditions of confidentiality in the provision of pharmaceutical services and respects the right to privacy.	1
Manages the staff of the pharmacy organization, to implement an effective personnel policy using motivational attitudes;	2
Manages socio-psychological processes, prevents conflict situations;	1
Predicts the economic performance of the pharmacy;	2
Analyzes inventories and determines the sources of their financing;	2
Ensures compliance with occupational health and safety regulations and labor legislation;	1
Applies methods of financial and economic analysis, analysis of the main	2

performance indicators of pharmacies;	
Conducts marketing research in the pharmaceutical market;	2
Applies methods and techniques of marketing analysis in the system of drug supply to the population and healthcare organizations;	2
Determines the demand and needs of medicines and medical devices	1
Generates prices for pharmacy products at all stages of product distribution,	1
Uses the provisions of regulatory legal acts in the formation of prices for medicines subject to price regulation	1
Uses methods to promote the sale of pharmacy products;	1
Keeps records of cash flows in the pharmacy's cash register and on the current account and other inventory items;	2
Conducts an inventory of inventory items, cash and settlements of a pharmaceutical organization;	1
Organizes a quality control system for medicines at the technological stages of the production process, including immunobiological	2
Organizes procurement processes based on the results of market research of suppliers of medicines for medical use and other pharmacy products;	2
Conducts acceptance control of incoming medicines and other pharmacy products, checking and completing the accompanying documents in accordance with the established procedure;	1
Carries out the withdrawal from circulation of medicines and pharmacy assortment goods that have become unusable, expired, falsified, counterfeit and substandard products;	2
Promotes a healthy lifestyle and life safety	1
Explains the rules of conduct in the event of emergencies of natural and man-made origin, describes ways to participate in recovery activities;	2
Establishes the fact of an emergency in a visitor to a pharmacy organization, in which first aid is necessary, including when exposed to agents of chemical terrorism and hazardous chemicals;	1
Conducts first aid activities for visitors in case of emergency conditions before the arrival of an ambulance team;	1
Uses medical means of protection, prevention, medical care and treatment of lesions with toxic substances of various nature, radioactive substances and biological agents;	2
Uses the regulatory documentation regulating the treatment of drugs;	
Uses normative, reference and scientific literature to solve professional problems.	1
Uses the official websites of government agencies to solve professional tasks.	1
Sells medicines, pharmaceutical products and medical devices, conducts their pre-sale preparation, taking into account the peculiarities of consumer properties;	1
Prepares documentation on the claim work;	2
Uses regulatory, reference and scientific literature to identify counterfeit, substandard and counterfeit medicines;	1
Performs labor actions taking into account their impact on the environment, preventing the occurrence of environmental hazards;	2
Defines and interprets the main environmental indicators of the state of the production environment in the production of medicines;	1
Provides pharmaceutical advice to consumers of medicines in accordance with the norms of pharmaceutical ethics and deontology;	2
Provides pharmaceutical information to medical professionals in accordance with the norms of pharmaceutical ethics and deontology	2
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 data on the effectiveness and safety of the medicinal product with data on the medicinal product contained in	1

the instructions for its use;	
3.2. Manufacture and drug preparation	
Complies with the rules of occupational health and safety	
Carries out the selection of excipients in the manufacture and manufacture of medicines	2
Identifies and prevents pharmaceutical incompatibilities	1
Performs the necessary calculations of medicinal and auxiliary substances, individual single doses, draws up a passport of written control during the intra-pharmacy manufacture of medicines	1
Selects the best technology option with quality assessment at each stage of manufacturing the dosage form.	1
Manufactures all types of dosage forms and medicines according to an individual formulation	2
Selects the packaging material and carries out labeling depending on the type of dosage form, route of administration and physico-chemical properties of medicinal and auxiliary substances.	1
Observes and ensures the necessary sanitary regime in pharmacies	1
It doses medicines depending on the dosage form of the aggregate state: by weight and by volume	1
Uses normative, reference and scientific literature to solve professional problems.	1
Applies GMP rules for the organization of pharmaceutical production	2
Applies validation and risk analysis methods in the manufacture of medicines	2
Evaluates critical process parameters	2
Uses rational methods of collecting, primary processing and drying medicinal plant raw materials, taking into account the protection and reproduction of wild medicinal plants;	1
3.3. Sale of medicines	
Applies the provisions of regulatory legal acts for the sale of medicines and medical products in the conditions of pharmaceutical organizations	1
Organizes work in the main links of the pharmaceutical market distribution system.	2
Conducts pharmaceutical examination of prescriptions and bill of lading requirements, as well as their registration and taxing in accordance with the established procedure;	1
Conducts the release of medicines and medical devices under preferential drug provision programs	1
Distributes medicines and other pharmacy products to individuals, as well as releases them to departments of medical organizations, monitoring compliance with the procedure for the release of medicines for medical use and other pharmacy products;	2
Performs office work on the management of cash registers, organizational and administrative, accounting documents for the retail sale of medicines and medical products	2
Performs office work on the management, organizational and administrative, payment accounting documents for wholesale sales;	2
Organizes and carries out the display of medicines and pharmacy products in the sales area and (or) storefronts of departments of the pharmacy organization;	1
Conducts a quantitative accounting of medicines in a pharmacy;	1
Keeps records and reports on medicines dispensed under preferential drug provision programs for the population;	1

3.4. Provision of storage and transportation conditions for medicines	
Applies the rules of good practice for the storage of medicines and medical products, adheres to the technology of storage of pharmacy products;	1
Organizes the storage of various groups of medicines	1
Applies and adheres to the rules of drug destruction, the principles of the use of the "cold chain" during drug transportation, the procedure for monitoring the quality of immunobiological drugs during transportation	1
Organizes the storage of parapharmaceutical products;	1
Monitors compliance with the storage conditions of medicines and medical products, including immunobiological medicines, in accordance with the principles of the "cold chain".	1
Checks the accompanying documentation, maintains accounting records	2
Forms logistics chains during the transportation of goods from the manufacturer to the end user;	2
Selects the supplier, concludes supply contracts;	2
Prepares documentation on the claim work;	2
Applies the rules of good practice for the storage of medicines and medical products, adheres to the technology of storage of pharmacy products;	2
3.5. Quality control of medicines	
Conducts quality control of medicines manufactured in the pharmacy;	1
Conducts pharmaceutical analysis of pharmaceutical substances, excipients and medicines in accordance with quality standards	2
Identifies substandard, counterfeit and falsified medicines	2
Creates specifications and sampling plans;	2
Uses normative literature to solve professional problems;	2
Prepares reagents, reference, titrated and test solutions, carries out their control and standardization.	1
Determines the general quality indicators of medicinal substances: solubility, melting point, density, acidity and alkalinity, transparency, color, ash, weight loss during drying;	1
Interprets the results of UV and IR spectrometry to confirm the identity of medicinal substances.	2
Uses various types of chromatography in the analysis of medicinal substances and interprets their results.	2
To establish the quantitative content of medicinal substances in the substance and dosage forms by titrimetric methods, physico-chemical methods.	2
Conducts tests for the purity of medicinal substances and sets limits on the content of impurities by chemical and physico-chemical methods	2
Performs calculations of the amount of medicinal and auxiliary substances and their quality control;	2
Applies basic physico-chemical and chemical analysis methods for the development, research and examination of medicines, medicinal raw materials and biological objects;	2
Recognizes medicinal plant raw materials by external signs in nature;	1
Determines stocks and possible volumes of preparations of medicinal plant raw materials.	1
Conducts resource-based research	2
Conducts qualitative microchemical reactions to the main groups of biologically active substances in medicinal plant raw materials;	1
Determines medicinal plant raw materials in whole and crushed form using determinants, evaluates the quality of medicinal plant raw materials according to pharmacopoeial requirements	1

Prepares micropreparations of various morphological groups medicinal and vegetable raw materials;	1
Conducts qualitative reactions to the main groups of biologically active substances in medicinal plant raw materials	1
Conducts pharmacognostic analysis of medicinal plant raw materials and medicinal herbal preparations;	2
Performs registration, processing and interpretation of the results of the conducted tests of medicines, raw materials and packaging materials;	2
Conducts the analysis of toxic substances using a complex of modern high-tech physico-chemical, biological and chemical analysis methods;	2
Interprets the results of forensic chemical and chemical toxicological examination taking into account the processes of biotransformation of toxic substances and the possibilities of analytical research methods in accordance with the current regulatory documentation;	2
3.6. Information and advisory activities	
Informs doctors, pharmacists and the public about the main characteristics of medicines, belonging to a certain pharmacotherapeutic group, indications and contraindications for use;	2
Solves the issue of the possibility of replacing one drug with another and rational intake;	2
Identifies and prevents pharmaceutical incompatibilities;	1
Analyzes the pharmacokinetics and pharmacodynamics of a drug based on knowledge about morphofunctional features, physiological conditions and pathological processes in the human body;	1
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;	1
Performs pharmacovigilance, development, implementation, registration and monitoring of the main and side effects, ways to prevent side effects;	2
It takes into account morphofunctional features, physiological conditions and pathological processes in the human body when choosing over-the-counter medicines and other pharmacy products;	1
Knows the symptoms, clinical and laboratory indicators and the values of vital signs in common diseases;	1
Provides information and consulting assistance to visitors of a pharmacy organization when choosing medicines and other products of the pharmacy range, on issues of their rational use, taking into account the biopharmaceutical characteristics of dosage forms;	1
3.7.Research activities	
Applies the methods of scientific research and critical analysis of modern scientific achievements to solve professional problems	2
Participates in the development, improvement of medicines, their production, examination, registration, preclinical, clinical trials in accordance with the requirements of national and international standards (GLP, GCP, GMP, GDP..)	2
Carries out the selection of excipients in the development of dosage forms, taking into account the influence of biopharmaceutical factors.	2
Selects the best technology option with quality assessment at each stage of manufacturing the dosage form.	2
Selects the packaging material depending on the type of dosage form, route of administration and physico-chemical properties of drugs and excipients.	1
Determines the influence of pharmaceutical factors, storage conditions, type of packaging and packaging on the quality and therapeutic activity of the drug, its stability during storage.	1
Conducts standardization of various dosage forms in accordance with current	1

regulations and documentation.	
Applies basic physico-chemical and chemical analysis methods for the development, research and examination of medicines, medicinal plant raw materials and biological objects;	2