Basic Degree Program in Specialty 33.08.02 Management and Economy of Pharmacy (Level of Top Qualification Personnel Training in Residency)

Terms, Workload of the Degree Program and Qualification of Graduates

Name	Qualification	Term of education including the holidays provided after the completion of the State Final Certification	Workload (in credits)
Residency program	Pharmacist- manager	2 years	120

Purpose (Mission) of the Degree Program

The mission of the residency program in "Management and Economy of Pharmacy" is training of practice-oriented high-skilled personnel of new formation, who are able to carry out managerial, control and permission activity at high professional level in the fields of development, production and quality control of medicinal products, in the field of circulation of medicinal products and control in the field of circulation of medicinal products in compliance with the established requirements and standards in the field of healthcare.

The degree program is aimed at the implementation of the following principles, namely: application of the results of theoretical education in professional and pedagogical practices, carrying out of professional activities based on the continuous development and innovation.

Demand for Graduates

Graduates of the residency program in "Management and Economy of Pharmacy" are in demand with pharmaceutical organizations in St. Petersburg and the Northwestern Federal District. JSC "St. Petersburg Pharmacies", LLC "Pharmacies Nevis", Scientific and Technological Company "POLYSAN" LTD, group of companies "ERKAFARM NORTH-WEST" and others are among them.

Requirements for Enrollment in the Degree Program

The persons with higher pharmaceutical education who have passed entrance examinations in accordance with the Regulations for Admission to Degree Programs, namely residency programs are allowed for enrollment.

Graduate's Qualification Characteristic Areas of Professional Activity

The area of professional activity of graduates who have completed the residency program includes circulation of medicinal products.

According to the register of professional standards (the list of types of professional activity approved by Order No. 667n of the Ministry of Labor of Russia dated 29.09.2014), the areas of professional activity and fields of professional activity which the graduates who have completed the residency program (hereinafter referred to as graduates) can be engaged in include:

02 Healthcare (in the field of circulation of medicinal products and other pharmacy goods);

Graduates can be engaged in professional activity in other areas and (or) fields of professional activity if their education level and acquired competences correspond to the employee's qualification.

Objects of Professional Activity

The objects of professional activity of graduates in degree program 33.08.02 Management and Economy of Pharmacy are:

a set of facilities and technologies aimed at creating conditions for development, manufacturing, quality control, circulation of medicinal products as well as control in the field of circulation of medicinal products according to the established healthcare requirements and standards; individuals and legal entities.

Types of Professional Activity

Types of professional activity which graduates of the residency program are prepared for: control and permission; organizational and managerial.

Tasks of Professional Activity

The graduate who has completed the residency program is ready to carry out the following job tasks:

Control and permission activities:

participation in carrying out of control and permission procedures related to circulation of medicinal products;

Organizational and managerial activities:

organization of production and manufacture of medicinal products;

management of activities of organizations involved in the field of circulation of medicinal products and their structural units;

organization of measures for storage, transportation, seizure and destruction of medicinal products;

maintenance of accounts and records in a pharmaceutical organization and its structural units;

management of personnel labor in pharmaceutical organizations and their structural units proceeding from the health and safety requirements;

compliance with the basic requirements of information security.

List of Professional Standards Corresponding to the Professional Activity of Graduates who have Completed the Degree Program

Item No.	Code of professional standard	Name of professional standard		
	02 Healthcare			
2.	02.012	Specialist in the field of pharmaceutical activity management		

General Characteristic of the Degree Program

Planned results of completing of the degree program (competences) and indicators of their achievement

In accordance with the aims of the degree program and types of tasks of professional activity, the graduate of degree program 33.08.02 Management and Economy of Pharmacy shall have the following competences characterized by the indicators of their achievement:

Codes	Competences, indicators of competence achievement		
UC-1	Readiness to think abstractly, analyze, synthesize		
UC-1.1	Develops and substantively argues a problem situation solving strategy based on system and interdisciplinary approaches		
UC-1.2	Logically analyzes, systematizes and summarizes information, uses methods and techniques of argumentation culture in communication		
UC-2	Readiness to manage a team, perceive social, ethnic, religious and cultural differences in a non-judgmental manner		
UC-2.1	Develops a collaborative strategy and, on its basis, arranges the selection of team members to achieve the set goal, assigning roles in the team		
UC-2.2	Settles conflicts and contradictions in business communication proceeding from the interests of all parties		

Codes	Competences, indicators of competence achievement
UC-3	Readiness to participate in teaching activities under programs of secondary and higher medical education or secondary and higher pharmaceutical education, as well as under additional training programs for persons with secondary vocational or higher education, according to the procedure prescribed by the federal executive body responsible for the development of public policy and statutory regulation in the field of healthcare
UC-3.1	Participates in the development and update of working programs, learning and teaching materials for programs of secondary and higher pharmaceutical education based on the requirements of federal and local regulatory legal acts regulating activity in the field of secondary vocational and higher education
UC-3.2	Makes educational process for students with different forms of disability taking into account their needs and capabilities based on the application of technologies and teaching aids of inclusive education;
UC-3.3	Creates electronic educational-methodical resources in accordance with the principles of doing electronic learning, applying distance learning technology
PC-1	Readiness to carry out procedures of import of medicinal products into the Russian Federation and export of medicinal products from the Russian Federation
PC-1.1	Arranges the procedure of import of medicinal products into the Russian Federation and export of medicinal products from the Russian Federation
PC-1.2	Draws up the permits for import of not registered medicinal products, registered and (or) not registered medicinal products intended for conduct of clinical trials
PC-1.3	Communicates for business using a foreign language
PC-2	Readiness to carry out procedures of withdrawal of falsified, substandard and counterfeit medicinal products from civil circulation and their destruction
PC-2.1	Arranges the withdrawal of falsified, substandard and counterfeit medicinal products and other pharmacy goods from civil circulation and their destruction
PC-2.2	Draws up the documentation for withdrawal of falsified, substandard and counterfeit medicinal products and other pharmacy goods from civil circulation and their destruction
PC-3	Readiness to carry out the procedures provided for during the state registration of medicinal products
PC-3.1	Coordinates activities of the units of the manufacturer of medicinal products within the procedure of state registration of medicinal products
PC-3.2	Makes registration dossiers of medicinal products Assesses costs and terms for all procedures of state registration of medicinal products
PC-3.3	Assesses costs and terms for all procedures of state registration of medicinal products
PC-4	Readiness to apply basic management principles in the professional sphere
PC-4.1	Makes managerial decisions based on carried out marketing researches Applies principles of organization and HR design when planning the activities of
PC-4.2	pharmaceutical organizations and their structural units
PC-4.3	Manages the quality of the current performance of the pharmaceutical organization

Codes	Competences, indicators of competence achievement		
PC-5	Readiness to organize pharmaceutical activity		
PC-5.1	Ensures compliance with the license requirements and conditions when carrying out pharmaceutical activities		
PC-5.2	Arranges for the resources provision of activity of a pharmaceutical organization		
PC-5.3	Arranges the information and advice assistance for the population and medical professionals on issues of rational use of medicinal products		
PC-5.4	Arranges work with notifications of undesirable reactions to medicinal products as well as information on substandard medicinal products and other pharmacy goods		
PC-5.5	Applies tools of pharmacoeconomic analysis when arranging the activities of pharmaceutical organizations		
PC-6	Readiness to assess economic and financial performance used in the field of circulation of medicinal products		
PC-6.1	Readiness to assess economic and financial performance used in the field of circulation of medicinal products		
PC-6.2	Assesses financial and economic conditions of innovation within the identified problem in the field of circulation of medicinal products		
PC-6.3	Analyzes the data of analytic databases containing economic and financial performance of pharmaceutical organizations in order to plan the organization's activity		
PC-7	Readiness to organize engineering processes in the production and manufacture of medicinal products		
PC-7.1	Provides facilities and resources environment for engineering process in the production and manufacture of medicinal products		
PC-7.2	Provides human resources environment for engineering process in the production and manufacture of medicinal products		
PC-8	Readiness to arrange the medicinal product expertise using chemical, biological, physical and chemical and other methods		
PC-8.1	Arranges the storage of batches and standard samples, documentation and storage of the results of the medicinal product expertise		
PC-8.2	Cooperates with accredited test laboratories and competent public authorities within the procedures of medicinal product expertise		
PC-9	Readiness to organize the quality control of medicinal products		
PC-9.1	Draws up standard operating procedures when arranging the quality control of medicinal products in the conditions of pharmaceutical organization		
PC-9.2	Monitors compliance with the standard operating procedures when carrying out quality control of medicinal products in the conditions of pharmaceutical organization		
PC-9.3	Arranges control of availability and storage conditions of reagents and special-purpose equipment used for quality control of medicinal products in the conditions of pharmaceutical organizations		

Mandatory part (name, workload, final discipline assessment)

- 1. Business Communication Conflict Resolution Studies 3 credits (108 hours), in-class work 28 hours, pass-fail test
- 2. Pedagogy 3 credits (108 hours), in-class work 28 hours, pass-fail test
- 3. Logic and Theory of Argumentation 3 credits (108 hours), in-class work 30 hours, pass-fail test
- 4. Pharmacy Innovation Management 3 credits (108 hours), in-class work 36 hours, pass-fail test, course project
- 5. Pharmacy Management 3 credits (108 hours), in-class work 32 hours, graded test

- 6. Marketing Communications Management 6 credits (216 hours), in-class work 58 hours, examination
- 7. State Regulation in the Field of Circulation of Medicinal Products 3 credits (108 hours), in-class work 32 hours, graded test
- 8. Quality Control of Medicinal Products 3 credits (108 hours), in-class work 30 hours, pass-fail test
- 9. Arrangement of Medicinal Product Registration and Expertise 3 credits (108 hours), in-class work 30 hours, pass-fail test
- 10. Pharmacoeconomic Analysis 3 credits (108 hours), in-class work 22 hours, pass-fail test
- 11. Product Marketing 6 credits (216 hours), in-class work 58 hours, examination
 - Elective disciplines (name, workload, final discipline assessment)
- 12. Foreign Language 3 credits (108 hours), in-class work 28 hours, pass-fail test
- 13. Good Manufacturing Practice of Medicinal Products 3 credits (108 hours), in-class work 30 hours, passfail test
- 14. Basics of Pricing Processes Modeling in the Pharmaceutical Market 3 credits (108 hours), in-class work 28 hours, pass-fail test
- 15. Methodology for Pharmaceutical Market Researches 3 credits (108 hours), in-class work 28 hours, passfail test
- 16. Statutory and Regulatory Platform for Circulation of Narcotic Drugs, Psychotropic Substances and Their Precursors 3 credits (108 hours), in-class work 28 hours, pass-fail test *Optional subjects (name, workload, final discipline assessment)*
- 17. Pharmacy Logistics 2 credits (72 hours), in-class work 20 hours, pass-fail test
- 18. Marketing of Perfume and Cosmetic Products 2 credits (72 hours), in-class work 20 hours, pass-fail test *Practices (name, workload, final assessment)*
- 19. Practice in Human Resource Management 12 credits (432 hours), in-class work 14 hours, graded test
- 20. Pedagogical Practice 3 credits (108 hours), in-class work 8 hours, pass-fail test
- 21. Practice in Planning of Pharmaceutical Organization's Activity 18 credits (648 hours), in-class work 20 hours, graded test
- 22. Practice in Pharmaceutical Organization's Current Performance Quality Management 15 credits (540 hours), in-class work 17 hours, graded test
- 23. Practice in Arrangement of the Information and Advice Assistance for the Population and Medical Professionals 12 credits (432 hours), in-class work 14 hours, graded test *Elective disciplines (name, workload, final discipline assessment)*
- 24. Practice in Industrial Marketing 3 credits (108 hours), in-class work 5 hours, pass-fail test
- 25. Practice in Conduct of Marketing Researches in Pharmaceutical Activities 6 credits (216 hours), in-class work 8 hours, pass-fail test
- 26. Practice in Advertising Management 6 credits (216 hours), in-class work 8 hours, pass-fail test
 - State final certification
- 27. Preparation for and Passing of State Examination—3 credits (108 hours), in-class work—6 hours, pass-fail test

Resources Provision of the Degree Program

The degree program is provided with learning and teaching documentation, as well as materials in all disciplines (modules) and practices, including electronic educational-methodical complexes posted in electronic information and educational environment of the University.

The University has facilities and resources that are in compliance with applicable fire safety rules and regulations and ensure all types of the disciplinary and interdisciplinary preparation, practical and scientific research works of students, provided for by the curriculum.

The list of facilities and resources, learning and teaching support, required for implementation of the degree program, includes the following: special rooms in the form of classrooms for conducting lecture-type activities, seminar-type activities, course work development (course work execution), group and individual tutorials, current control and midterm assessment. There are also rooms for independent work and rooms for storage and preventative maintenance of training equipment. Special rooms are equipped with designated furniture and teaching aids intended for presentation of teaching information to a large audience. Laboratories are equipped with laboratory equipment depending on the degree of complexity. Sets of demonstration equipment and illustrative study guides providing for topic-based illustrations and corresponding to discipline (module) programs, working educational programs of disciplines (modules), are offered for lecture-type activities.

Rooms for students' independent work are equipped with computer hardware with the possibility of connecting to the Internet network and access to electronic information and educational environment of the organization. Furthermore, students' independent work is arranged with the use of electronic resources of the University.

The library fund is provided with the required number of printed publications, moreover, there is an access to electronic library systems.

The University has the necessary licensed software package the composition of which is given in working programs of disciplines (modules) and is subject to annual update.

The students are provided with an access (remote access), including in the event of doing electronic learning, applying distance learning technology, to today's professional data bases and inquiry and communications systems the composition of which is determined in working programs of disciplines (modules) and is subject to annual update.

During the whole period of studying every student and a teacher are provided for with an unlimited access (including the remote one) to electronic library systems and to electronic information and educational environment of the University from any place with the available Internet connection.

Electronic information and educational environment of the University provides for:

- the access to curricula, working programs of disciplines (modules), practices, editions of electronic library systems and electronic learning resources specified in working programs;
- recording of progress of the educational process, results of midterm assessment and results of mastering the degree program;
- the formation of electronic portfolio of the student, including the preservation of student's works and marks for these works by any participants of the educational process;
- interaction between participants of the educational process, as well as synchronous and (or) asynchronous communication via Internet.

Functioning of electronic information and educational environment complies with the requirements of the legislation of the Russian Federation in the field of education and is provided for with the relevant means of information and communication technologies and qualification of the University employees who use and maintain it.

Staffing of the Degree Program

Implementation of the residency program is ensured by the senior academic staff of the University, as well as by persons engaged in the implementation of the residency program under the terms of the civil contract.

The percentage of the academic staff (reduced to integer rates) having education that corresponds to the profile of the discipline (module) taught in the total number of the academic staff implementing the residency program is at least 70 %.

The percentage of the academic staff (reduced to integer rates) having a degree and (or) an academic rank in the total number of the academic staff implementing the residency program is at least 65 %.

The percentage of staff (reduced to integer rates) among the heads and employees of organizations whose activities are related to the specialization (profile) of the residency program (having at least 3 years of work experience in this professional field) in the total number of staff implementing the residency program is at least 10%.

Uniqueness and Competitive Advantages of the Program

This degree program has a relevant focus in the field of training practice-oriented personnel who are able to carry out managerial, control and permission activity in the area of development, production, quality control and circulation of medicinal products according to the established requirements and standards.

The program has been created in cooperation with employers. As part of the practice, residents acquire professional skills and experience in professional activity based at pharmaceutical organizations in St. Petersburg, the Northwestern Federal District and other regions of the Russian Federation. The key employers engaged in the educational process are JSC "St. Petersburg Pharmacies", LLC "ERKAFARM NORTH-WEST", LLC "NEVIS Pharmacies".

The program takes into account current scientific trends in innovative information and education technologies, flexible individual educational trajectories allowing for operative considering the global challenges of pharmacy, medicine and healthcare. The development of students' teamwork skills, interpersonal communication, decision-making, leadership is ensured in the process of academic studies (including interactive lectures, group discussions, role-playing games, trainings, case and simulation model studies). Disciplines are taught in the light of regional features of professional activities of graduates and the needs of employers. Case technologies and problem-based learning, business simulation games, portfolio method, as well as other education technologies stimulating students' cognitive activity are used within academic studies.

The content of the program represents the needs of today's labor market in organization of the production of medicinal products; arrangement of pharmaceutical activities; management of activities of organizations involved in the field of circulation of medicinal products and their structural units; organization of measures for seizure and destruction of medicinal products; maintenance of accounts and records in pharmaceutical organizations and their structural units; management of personnel labor in pharmaceutical organizations and their structural units proceeding from the health and safety requirements; compliance with the basic requirements of information security.

In addition, active career guidance counseling involving employers is carried out with students within the educational process. As part of the discipline "Statutory and Regulatory Platform for Circulation of Narcotic Drugs, Psychotropic Substances and Their Precursors", lectures on different issues are given regularly at the premises of pharmacy No. 250 of JSC "St. Petersburg Pharmacies", that allows graduates to get involved in the work processes of organizations more quickly. All graduates of the degree program in 33.08.02. "Management and Economy of Pharmacy" are in demand with pharmaceutical organizations.