«APPROVED»
Rector
Higher State Educational
Establishment of Ukraine
«Bukovinian State
Medical University»

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EDUCATIONAL AND PROFESSIONAL PROGRAMM

FOR TRAINING PROFESSIONALS AT HIGHER STATE EDUCATIONAL ESTABLISHMENT OF UKRAINE «BUKOVINIAN STATE MEDICAL UNIVERSITY»

PROFESSIONAL AREA	**22 Health Care**
SPECIALTY	**226 Pharmacy, Industrial Pharmacy**
HIGHER EDUCATION LEVEL	**Second (Master) level**
DEGREE	**Master**
PROFESSIONAL QUALIFICATION	**Master of Pharmacy**

PREFACE

1. **SUBMITTED BY**

Central Methodological Board, Higher State Educational Establishment of Ukraine «Bukovinian State Medical University»

2. **APPROVED BY**

Academic Council, Higher State Educational Establishment of Ukraine «Bukovinian State Medical University», on May 23, 2019 (minutes № 9).

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1. INTRODUCTION

1.1. General notion

Higher education level	Second (Master) level
Degree awarded	Master
Professional field	22 Health Care
Specialty	226 Pharmacy, Industrial Pharmacy
Restrictions concerning the form of studies	Full-time and part-time training is allowed
Educational qualification awarded	Master of Pharmacy, Industrial Pharmacy
Qualification in Diploma	Higher education degree − Master. Specialty - Pharmacy, Industrial Pharmacy
Description of professional area	**The object of activity:** medicines at all stages of life cycle, pharmaceutical aid **Objectives** – to provide academic education of graduates in fundamental and applied sciences and vocational training by acquiring general and special competence for the professional activity in the corresponding position, including the provision of pharmaceutical aid, guaranteeing the safe and rational use of medicines, monitoring the effectiveness of pharmacotherapy and/or side effects, readiness to bear (or divide) the responsibility for the results of the pharmacotherapy, the stages of drugs manufacture, their storage, control as provision, distribution, promotion, regulation, provision of medicines and other products of the pharmacy range, taking into account current international trends, providing pharmaceutical care based on the principles of pharmaceutical ethics and deontology. **Theoretical content of professional area.** The acclivity of Master of pharmacy, industrial pharmacy includes advisory-communicative, organizational, technological, control-analytical, administrative-economic (managerial), research functions, determination of safety, efficiency and economy of pharmacotherapy, requirements for medicinal products and other products of the pharmacy assortment, organization of their supply; provision of modern technology for the development and manufacture of medicines by prescriptions and requirements of health facilities; taking, storage and selling medicines, control over the quality of medicines; the implementation of pharmaceutical care, the conduct of advertising and informational work, adherence to the principles of pharmaceutical ethics and deontology, continuous improvement of professional level. **Methods, methodology and technologies**: organoleptic, physical, chemical, physico-chemical, biopharmaceutical, pharmaco-technological, microbiological, biochemical and pharmacological, clinical, computational and economic, pharmacoeconomic; marketing research, modeling, prognosing, etc. **Tools and equipment**. During the acquisition of higher pharmaceutical education, equipment is used for fundamental and applied research, which is modern, widely used in practice and safe from the point of view of occupational safety.
Academic rights of graduates	On completion of educational and professional program in the specialty "Pharmacy, Industrial Pharmacy", a specialist must enter a program of postgraduate education, which is carried out in accordance with current normative and legal requirements, depending on the sphere of activity. On completion of educational professional program in the specialty "Pharmacy, Industrial Pharmacy", a specialist may also apply for a third

	(educational and scientific) level - a degree of a doctor of philosophy in accordance with current legislation.

To create the educational curriculum the following regulations of the Law of Ukraine "On Higher Education" have been employed:

1) article 1, point 1. 17 – educational curriculum (educational-professional, educational-scientific) – the system of educational components on an appropriate level of higher education within the frame of a specialty determining:

– requirements to the level of educations of persons who can start studies according to this curriculum;

– the list of educational subjects and logical order of their learning;

– the amount of ECTS credits essential to complete the curriculum;

– expected results of studies an applicant for an appropriate level of higher education is supposed to master;

2) article 10, point 3 – higher education standard stipulated the following requirements for the curriculum:

– amount of ECTS credits essential to obtain an appropriate degree of higher education;

– competence list of a graduate;

– standard contents of training of applicants for higher education formulated within the terms of the results of studies (total knowledge, skills, abilities, other competence);

– forms of attestation of applicants for higher education;

– requirements to the internal system providing the quality of higher education;

3) article 5, point 1 – second (Master) level should assume acquiring advanced theoretical and/or practical knowledge, abilities, skills in the specialty chosen (or specialization), general principles of methodology of scientific and/or professional activity, other competence essential for effective implementation of innovative tasks of an appropriate level of professional activity;

4) article 1, point 1.13 – competence determines the ability of a person to fulfill successfully professional and further educational activity, and presents the result of learning at a certain level of higher education;

5) article 1, point 1.19 – results of education – total amount of knowledge, abilities, skills, other competence acquired by a person in the process of learning according to a certain educational-professional, educational-scientific curriculum, that can be identified, assessed and evaluated.

On the basis of these principles (by the terminology of the Law of Ukraine "On Higher Education") the following structure of the curriculum is accepted:

– determination of the types, contents and system of appropriate knowledge of Master's innovation activity (higher education contents) considering the requirements of professional standards or equivalent standard base;

– regulation of the system of Master's competence as ability for effective completion of innovative tasks according to the level of professional activity considering the requirements of professional standards or equivalent standard base and the requirements of the National Qualification Frame;

– determination of the curriculum results of learning and their degree of complexity by means of competence decomposition;

– substantiation of the nomenclature of the kinds of educational activity due to an adequate distribution of the curriculum results of learning according to educational subjects, practical training, individual work;

– determination of credits and mastering all the kinds of educational activity.

Realization of a competence approach in the development of higher education by means of creation of a definite relationship of external purposes of higher education with the subjects, practical training and individual tasks is a crucial factor of the higher education quality and BSMU and creation of a real system for its internal providing.

Clear and understandable structure and contents of the curriculum are topical for applicants,

learners, teachers and employers.

The educational curriculum is used during:

- accreditation of the educational curriculum, inspection of educational activity on specialty and specialization;
- elaboration of the educational plan, curricula on educational subjects and practical training;
- elaboration of diagnostic means of the higher education quality;
- determination of the contents of education in the system of advanced qualification training;
- professional orientation of learners in certain profession.

The educational-professional curriculum takes into account the requirements of the Law of Ukraine "On Higher Education", the National Qualification Frame, and determines the following:

- the volume and term of education for Masters;
- common competence;
- special (professional) competence;
- the list and volume of educational subjects to master the competence of the curriculum;
- requirements to the structure of educational subjects.

The educational-professional curriculum is used for:

- compiling educational plans and working educational plans;
- formation of student individual plans;
- formation of programs on educational subjects, practical training, contents of individual tasks;
- determination of information basis to form the diagnostic means;
- accreditation of the curriculum;
- external quality control of training specialists;
- attestation of Masters on specialty 226 Pharmacy, Industrial Pharmacy.

Users of the educational-professional curriculum are:

- applicants for higher education studying at Higher State Educational Establishment of Ukraine «Bukovinian State Medical University»;
- scientific-pedagogical workers of Higher State Educational Establishment of Ukraine «Bukovinian State Medical University», who provide training of Masters on specialty 226 Pharmacy, Industrial Pharmacy;
- Examination Board on Specialty 226 Pharmacy, Industrial Pharmacy;
- Acceptance Board, Higher State Educational Establishment of Ukraine «Bukovinian State Medical University».

The educational-professional curriculum applies to the Departments of Higher State Educational Establishment of Ukraine «Bukovinian State Medical University» involved in training of Masters on specialty 226 Pharmacy, Industrial Pharmacy.

1.2. Regulations

The educational-professional curriculum is compiled on the base of the following regulations:

1. Law of Ukraine «On Higher Education» dated 01.07.2014 // Gazette of the Supreme Council (Verkhovna Rada). – 2014. – № 37, 38.

2. Decision of the Cabinet of Ministers of Ukraine dated 29.04.2015 № 266 «On Approval of Professional Areas and Specialties Training Applicants for Higher Education (with changes)».

3. The order to implementation of a single state qualification exam for the Masters, applicants for higher education, on specialties in the professional area "22 Health Care", approved by the Resolution of the Cabinet of Ministers of Ukraine dated on March 28, 2018, № 334.

4. Licensing terms concerning implementation of educational activity approved by of the Resolution of the Cabinet of Ministers of dated on December 30, 2015, № 1187 (edited in the form of the Decision of the Cabinet of Ministers of Ukraine dated on May10, 2018, № 347).

5. National Qualification Frame. Supplement to the Decision of the Cabinet of Ministers of Ukraine dated on November 23, 2011, № 1341.

1.3. Terms and their definitions

The terms have the following definitions in the curriculum:

1) autonomy and responsibility – ability to perform the tasks independently, to solve the problems and take responsibility for the results of one's own activity;

2) accreditation of the curriculum – assessment of the curriculum and/or educational activity of a higher educational establishment according to the curriculum for the purpose of correspondence with higher education standards; ability to fulfill standard requirements and achieve the results of studies declared in the curriculum; achieving the results of studies declared in the curriculum;

3) attestation – determination of correspondence of the knowledge, skills and other competence to the standard requirements of higher education;

4) types of educational activity of an applicant – educational subjects, practical training, individual tasks;

5) higher education – the total amount of knowledge, abilities and practical skills, ways of thinking, professional, world outlook and social qualities, moral-ethical values, other competence, acquired at the higher educational establishment in an appropriate professional area according to certain qualification on the higher education levels, which is much higher than the level of completed general secondary education by its complexity;

6) field of knowledge - the main subject area of education and science, which includes a group of related specialties, according to which the vocational training is carried out;

7) disciplinary competence - the detailed competence of the educational program as a result of the decomposition of the competence of a specialist in a certain level of higher education;

8) The European Credit Transfer and Accumulation System (ECTS) - a transfer and accumulation system used in the European Higher Education Area for the purpose of providing, recognizing, confirming qualifications and educational components, and facilitating the academic mobility of higher education graduates. The system is based on determining the academic load of the higher education applicant required to achieve the defined learning outcomes and is accounted for in ECTS credits;

9) means of diagnostics - documents approved in accordance with the established procedure, and intended to establish the degree of achievement of the planned level of formation of competencies of the student in control activities;

10) applicants for higher education - people studying at a higher educational establishment at a certain level of higher education in order to obtain the appropriate degree

and qualification;

11) content module - a set of skills, knowledge, values, which ensure the implementation of a certain competence;

12) knowledge - comprehended and mastered by the person scientific information, which is the basis of his/her conscious, purposeful activity. Knowledge is divided into empirical (factual) and theoretical (conceptual, methodological);

13) integral competence - a generalized description of the qualification level, which expresses the basic competencies of the characteristics of the level of education and/or professional activity;

14) integrated assessment - the result of evaluating specific tasks of different levels, taking into account the priority factor (planned level of the formed competence);

15) information support of the discipline - the means of training, in which the basics of knowledge on a certain discipline at the level of modern achievements of science and culture, support for self-education and self-education (textbooks, teaching aids, teaching aids, teaching aids, dictionaries, encyclopedias, directories, etc.) are systematically set forth;

16) qualification level - the structural unit of the National Qualifications Framework, determined by a certain set of competencies that are typical for qualifications of this level;

17) qualification - the official result of evaluation and recognition obtained when the authorized competent authority has established that the person has attained the competencies (results of training) according to the prescribed standards;

18) competence/ competences (for NQF) - the ability of a person to perform a certain type of activity, expressed through knowledge, understanding, skills, values, other personal qualities;

19) communication - the interconnection between students for the purpose of information transfer, coordination of actions, joint activity;

20) credit of the European Credit Transfer *and* Accumulation System (hereinafter ECTS credit) - a unit of measure of the amount of academic load of the higher education applicant required to achieve the (expected) learning outcomes. The volume of one ECTS credit is 30 hours. The load of one academic year in full-time education is, as a rule, 60 ECTS credits;

21) Master's degree - an educational qualification obtained at the second level of higher education and given by a higher education institution as a result of successful completion of a relevant education program by a higher education student. The master's degree is acquired through an educational and professional or an educational and scientific program. A master's degree in medical, pharmaceutical or veterinary medicine is obtained on the basis of complete general secondary education and is given by a higher education institution (research institution) as a result of successful completion of a relevant educational program by a higher education student, amount of which is 300-360 ECTS credits.

22) methodical support of the discipline - the recommendations for the support of the student's educational process for all types of training sessions, including, information on the means and procedure of control measures, their form and content, methods of solving exercises, sources of information;

23) module control - an assessment of the level of achievement by the student of the planned level of formation of competencies according to the types of training sessions;

24) educational discipline - a set of modules to be subject to final control;

25) educational element - the minimum educational information of independent semantic value (concept, phenomenon, relation, algorithms);

26) *object* of diagnostics - a competence, the mastery of which is provided by a certain type of educational activity of the applicant;

27) educational process - an intellectual, creative activity in the field of higher education and science, which is carried out in the higher educational establishment (scientific institution) through the system of scientific, methodical and pedagogical activities and is aimed at the transfer, mastering, multiplication and use of knowledge, skills and other competencies by

students, as well as the formation of a harmoniously developed personality.

28) educational (educational *and* professional or educational *and* scientific*)* program - a system of educational components at the appropriate level of higher education within the specialty that defines the requirements for the level of education of people who can begin to study under this program, the list of academic disciplines and the logical sequence of their study, the number of ECTS credits required for the implementation of this program, as well as expected learning outcomes (competencies) that the applicant of the relevant higher education level must possess;

29) educational activity - the activity of higher educational establishment, which is carried out with the purpose of securing higher, postgraduate education and meeting other educational needs of higher education and other people;

30) final control - the comprehensive assessment of the planned level of the formation of disciplinary competencies;

31) current control - the assessment of the student's learning of the material during the classroom training session (student examination at lectures, checking and receiving reports on laboratory work, testing, etc.);

32) discipline curriculum - a normative document defining the content of the discipline in accordance with the educational curriculum, developed by the department, which is secured by the rector's order for teaching discipline;

33) learning outcomes (Law of Ukraine "On Higher Education") - a set of knowledge, abilities, skills and other competences acquired by a person in the process of training in a certain educational and professional, educational and scientific program that can be identified, quantified and measured;

34) learning outcomes (National Qualifications Framework) - the competence (knowledge, understanding, skills, values, other personal qualities) that a student acquires and/or demonstrates after the completion of the training;

35) level of the formation of disciplinary competence - the proportion of correct answers or performed essential operations from the total number of questions or significant operations of the decision benchmark;

36) guidance document of a subject - a normative document developed on the basis of the curriculum in accordance with the annual curriculum (contains the distribution of total time for the assimilation of separate educational elements and modules according to the types of training classes and forms of training);

37) independent work - the activity of a student on the study of educational elements and content modules, mastering of planned competencies, implementation of individual tasks, preparation for control measures;

38) specialty - a component of the knowledge field, according to which the professional training is carried out;

39) standard of higher education - a set of requirements for the content and results of educational activities of the higher educational establishment and scientific institutions for each level of higher education within each specialty;

40) standard of educational activity - a set of minimum requirements for personnel, educational, methodological, material, technical and informational support of the educational process of the higher educational establishment and scientific institution;

41) skill - the ability to apply knowledge to accomplish tasks and solve problems. Skills are divided into cognitive (intellectual and creative) and practical (based on skill using methods, materials, instructions, and tools).

42) quality of higher education - the level of knowledge, skills, abilities, and competences acquired by a person that reflects his/her competence in accordance with higher education standards.

1.4. Abbreviations

NQF - national qualifications frame;
CC - common competence;
SC - special (professional, subject) competence;
GR - general results;
SR – special (occupational, subject) results;

2. MASTER'S COMPETENCE

Integral competence is the ability to solve typical and complicated specialized tasks and practical problems in professional activity in the field of health care, or in the process of studying that envisages carrying out investigations and/or realization of innovations and is characterized with complexity and uncertainty of conditions and demands

2.1. Common competence according to the National Qualification Frame (NQF)

CC_1	Ability to abstract thinking, analysis and synthesis, ability to study and be taught currently. Ability to act with social responsibility civil consciousness.
CC_2	Ability to apply knowledge in practical situations.
CC_3	Care for the environmental protection.
CC_4	Knowledge and understanding of the subject sphere and understanding professional activity.
CC_5	The spirit of entrepreneurship, the ability to show initiative
CC_6	Knowledge and understanding of the subject area and understanding of the profession
CC_7	Ability to adaptation and action in a new situation.
CC_8	Ability to communicate in a state language both orally and written form; ability to communicate in a foreign language
CC_9	Skills of using information and communication technologies
CK_{10}	Ability to choose a communication strategy, the ability to work in a team
CC_{11}	Ability to assess and ensure the quality of work performed
CC_{12}	Ability to conduct research at the appropriate level

2.2. Special (professional, subject) competence

The activities of the Master of Pharmacy include organizational, technological, control and analytical, administrative and economic (managerial) functions, definition of the need for medicinal products and medical products, organization of their supply; provision of modern technology for the manufacturing of medicines by prescriptions and requirements of health facilities; taking, storage and release of medicinal products, control over the quality of medicines; carrying out informational work, adherence to the principles of pharmaceutical deontology, continuous improvement of professional level.

SC_1	Ability to use the knowledge of normative legal, legislative acts of Ukraine and recommendations of appropriate pharmaceutical practice in professional activity
SC_2	Ability to carry out activity on development and registration of documentation on clear definition of technological processes of manufacturing and production of medicines in accordance with the rules of appropriate practice
SC_3	Ability to organize the production activities of pharmacies in the manufacturing of medicinal products in various forms, based on prescriptions of doctors and orders of medical institutions, including the substantiation of technology and selection of auxiliary materials in accordance with the rules of Good Pharmacy Practice (GPP)
SC_4	Ability to organize and participate in the manufacturing of medicines in the pharmaceutical industry, including the choice of technological process with substantiation of the technological process and the choice of appropriate equipment in accordance with the

	requirements of Good Manufacturing Practice (GMP)
SC_5	Ability to organize and carry out the procurement of medicinal plant raw material, taking into account the rational use of medicinal plant resources, to forecast and substantiate ways of solving the problem of preserving and protection the thickets of wild medicinal plants in accordance with the rules of the good practice of cultivation and collection of plant raw material (GACP)
SC_6	Ability to organize pharmacy activities for provision the population and health care facilities with medicinal products, parapharmaceutical products, medical supplies and medical perfumery and cosmetic products in accordance with the requirements of the National Drug Policy, Good Pharmacy Practice and other organizational and legal norms of pharmaceutical legislation.
SC_7	Ability to organize the reporting and accounting system (managerial, statistical, accounting and financial) in pharmacy establishments, conduct merchandising analysis, administrative work, documenting and quality management in accordance with regulatory acts of Ukraine
SC_8	Ability to analyze and forecast the main economic indicators of the pharmacy establishments activity, to make calculations of basic taxes and fees, to form prices for medicines and medical products in accordance with the current legislation of Ukraine
SC_9	Ability to develop, implement and apply management approaches in the professional activities of pharmacies, wholesale intermediaries, manufacturing companies and other pharmaceutical organizations in accordance with the principles of Good Pharmacy Practice and the Global Framework for FIP
SC_{10}	Ability to organize and carry out general and marketing management of assortment, innovation, price, marketing and communicative policies of the subjects of the pharmaceutical market on the basis of market research results and taking into account market processes in the national and international markets.
SC_{11}	Ability to conduct analysis of socioeconomic processes in pharmacy, forms, methods and functions of the pharmaceutical supply system of the population and its components in world practice, indices of need, efficiency and availability of pharmaceutical aid under the conditions of medical insurance and reimbursement of the cost of medicinal products
SC_{12}	Ability to organize, provide and carry out analysis of medicinal products and medicinal plant raw materials in pharmacies and control-analytical laboratories of pharmaceutical enterprises in accordance with the requirements of the State Pharmacopoeia and other regulatory acts
SC_{13}	Ability to organize and monitor the quality of medicinal products in accordance with the requirements of the State Pharmacopoeia of Ukraine and good practice, to determine the methods of sampling for the control of medicinal products in accordance with the requirements to certify them, to prevent the distribution of counterfeit medicines
SC_{14}	Ability to develop methods for quality control of medicinal products, pharmaceutical substances, medicinal plant material and auxiliary substances using physical, physico-chemical, and chemical methods of control
SC_{15}	Ability to determine medicinal products and their metabolites in biological fluids and tissues of the body, conduct chemical and toxicological studies for the diagnosis of acute poisoning, narcotic and alcoholic intoxication
SC_{16}	Ability to ensure the proper storage of medicinal products and medical devices in accordance with their physical and chemical properties and Good Storage Practice (GSP) rules in health facilities
SC_{17}	Ability to monitor the effectiveness and safety of the use of medicinal products by the population according to their clinical and pharmaceutical characteristics, as well as subjective attributes and objective clinical, laboratory and instrumental criteria for patient examination
SC_{18}	Ability to ensure the rational use of prescription and over-the-counter medicinal products in accordance with physico-chemical, pharmacological characteristics, biochemical,

	pathophysiological features of a particular disease and pharmacotherapeutic regimens of its treatment
SC_{19}	Ability to provide premedical aid to patients and victims in extreme situations
SC_{20}	The ability to provide counseling and pharmaceutical care during the selection and release of an over-the-counter medicinal product by assessing the risk / benefit ratio, compatibility, indications and contraindications based on the health status of a particular patient, taking into account the biopharmaceutical, pharmacokinetics, pharmacodynamics and physico-chemical properties of the medicinal product
SC_{21}	Ability to conduct sanitary and educational work among the population in order to prevent common diseases of internal organs, prevent dangerous infectious and parasitic diseases, as well as to promote the timely detection and maintenance of adherence to the treatment of these diseases in accordance with their medical and biological characteristics and microbiological characteristics

3. NORMATIVE CONTENT OF TRAINING, FORMATED IN TERMS OF RESULTS OF TEACHING

Competence	Learning outcomes	General learning outcomes according to NQF requirements
CC1	GR1	To conduct professional activities in social interaction based on humanistic and ethical principles; to identify future professional activities as being socially important for human health.
CC2	GR2	To apply knowledge of general and professional disciplines in professional activities.
CC3	GR3	To keep to the sanitary and hygiene regulations and safety requirements when carrying out professional activities.
CC4	GR4	To use results of independent search, analysis and synthesis of information from different sources for solving typical tasks of professional activity.
CC5	GR5	To position their professional activities and personal qualities in the pharmaceutical market; to formulate goals of own activity taking into account social and industrial interests
CC6	GR6	To argue information for decision making, to be responsible for them in standard and non-standard professional situations; adhere to the principles of deontology and ethics in professional activities.
CC7	GR7	To carry out professional activities using creative methods and approaches.
CC8	GR8	To carry out professional communication in modern Ukrainian literary language, use oral communication skills in a foreign language, analyze texts of professional orientation and translate foreign sources of information.
CC9	GR9	To carry out professional activity using information technologies, "Information databases", navigation systems, Internet resources, software and other information and communication technologies.
CC10	GR10	To keep to the rules of communication in professional interaction with colleagues, management, consumers, to work effectively in a team.
CC11	GR11	To use methods for assessing performance indicators; to identify reserves for improving labor productivity.
CC12	GR12	To analyze information obtained as a result of scientific research, to generalize, systematize and use it in professional activity.

Competence	Learning outcomes	Special (professional, subject) learning outcomes
SC1	SR1	To plan and implement professional activities on the basis of Ukrainian legal acts and recommendations of appropriate pharmaceutical practice.
SC2	SR2	To develop and process technological documentation for the manufacturing (production) of drugs in pharmacies and pharmaceutical companies.
SC3	SR3	To choose rational technology, to make medicines in different medical forms on prescriptions of doctors and orders of medical establishments, to issue them for leave. To perform technological operations: to weigh, measure, dosage various medicines by weight, volume, etc.
SC4	SR4	To substantiate the technology and organize the production of medicines at the pharmaceutical companies.
SC5	SR5	To organize and conduct rational harvesting of medicinal plant raw material.
SC6	SR6	To implement a complex of organizational and managerial measures for the provision of population and health care facilities with medicines and other products of the pharmacy range.
SC7	SR7	To carry out all kinds of registration in pharmacy establishments, administrative office work. To carry out the processes of product analysis, to provide entrance control of the quality of medicinal products and document their results.
SC8	SR8	Calculate the main economic activity indexes of pharmacies, as well as taxes and fees. Form all types of prices (wholesale, purchasing and retail) for medicines and medical products.
SC9	SR9	Develop, implement and apply management approaches in the professional activities of pharmacies, wholesale intermediaries, manufacturing companies and other pharmaceutical organizations in accordance with the principles of Good Pharmacy Practice and the Global Framework for FIP.
SC10	SR10	To organize and carry out general and marketing management by assortment, innovation, price, marketing and communicative policies of the subjects of the pharmaceutical market on the basis of marketing research results and taking into account market processes in the national and international markets.
SC11	SR11	To take into account data on socioeconomic processes in the society for the pharmaceutical provision of the population, to determine the effectiveness and availability of pharmaceutical aid in terms of medical insurance and reimbursement of the cost of drugs.
SC12	SR12	To apply modern methods of quality control of medicinal products and medicinal plant raw material in professional activity.
SC13	SR13.1	To carry out all kinds of medicines quality control.
	SR13.2	To make quality certificates, taking into account the results of the control carried out.
SC14	SR14.1	To identify the main organoleptic, physico-chemical, chemical and pharmaco-technological characteristics of drugs.

	SR14.2	To substantiate and choose methods for standardization, to perform statistical processing of results in accordance with the requirements of the State Pharmacopoeia of Ukraine.
SC15	SR15	To select biological objects of analysis, to carry out the determination of xenobiotics and their metabolites in biological environments, and to evaluate the results obtained taking into account the distribution of toxins in the body.
SC16	SR16	Determine the influence of environmental factors: moisture, temperature, light, etc. on the stability of medical products and medical products.
SC17	SR17	To use data from clinical, laboratory and instrumental studies to monitor the effectiveness and safety of the use of drugs.
SC18	SR18	Determine the influence of factors affecting the processes of absorption, distribution, deposit, metabolism and withdrawal of the medicinal product and are conditioned by the state, the peculiarities of the human body and the physico-chemical properties of the drug.
SC19	SR19	Provide emergency medical aid to emergency patients and victims of extreme situations.
SC20	SR20.1	To determine the advantages and disadvantages of medicinal products of various pharmacological groups taking into account their biopharmaceutical, pharmacokinetic and pharmacodynamic characteristics;
	SR20.2	To recommend pharmaceutical products and pharmacy products to consumers with advisory services.
SC21	SR21	To conduct sanitary-educational work in the professional activity in case of outbreaks of infectious diseases.

4. REQUIREMENTS FOR PREVIOUS LEVEL OF EDUCATION OF COMPETITORS

A person has the right to obtain a Master's degree on the basis of complete general secondary education, subject to the successful completion of external independent assessment of the quality education. A person has the right to obtain a Master's degree on the basis of the educational qualification level of a junior specialist, acquired on the specialty 5.12010101 "Pharmacy" subject to successful passing of entrance examinations.

5. THE VOLUME OF EDUCATIONAL PROGRAM FOR NORMATIVE AND VARIABLE PART

The volume of educational-professional program is 300 ECTS credits**.** The normative part of the program is 279 ECTS credits (93%). The volume of the sample is 21 ECTS credits (7%).

A minimum of 75% of the education curriculum should be directed to the formation of general and special (professional) competencies in the specialty defined by the standard of higher education.

6. DISTRIBUTION OF TRAINING RESULTS FOR EDUCATIONAL ACTIVITIES

The competencies that a competitor should master	Program learning outcomes	Name of the discipline, practice
Normative content of training		
I. The cycle of general (humanitarian and socio-economic, natural sciences) training		
CC_8	GR_8	Ukrainian
CC_1	GR_1	History of Ukraine and Ukrainian culture
CC_1, CC_4	GR_1, GR_4	Philosophy
CC_8	GR_8	Professional Ukrainian in use
CC_9, CC_{12}, SC_{14}	GR_9, GR_{12}, $SR_{14.2}$	Higher mathematics and statistics
CC_{12}, SC_{18}	GR_{12}, SR_{18}	Biological physics with physical methods of analysis
SC_{18}	$SR_{18.}$	Biology with the basics of genetics
SC_{18}	SR_{18}	Human anatomy and physiology
CC_8	GR_8	Latin language
CC_{12}, SC_{21}	GR_{12}, SR_{21}	Microbiology with the basics of immunology
CC_9	GR_9	Informational technologies if pharmacy
SC_{18}	SR_{18}	Pathological physiology
SC_{14}	$SR_{14.1}$	Organic chemistry
SC_{16}	SR_{16}	General and non-organic chemistry
SC_{14}	$SR_{14.1}$	Analytical chemistry
CC_{12}, SC_5	GR_{12}, SR_5	Pharmaceutical botany
SC_{18}	SR_{18}	Biological chemistry
CC_9	GR_9	Computer modeling in pharmacy
II. Professional training		
CC_3	GR_3	Hygiene in pharmacy and ecology
CC_1, CC_6, CC_{10}	GR_1, GR_6, GR_{10}	Ethics and deontology in pharmacy
SC_2, SC_3, SC_4	SR_2,SR_3, SR_4	Technology of drugs
		Life safety; basics of bioethics ans biosafety
SC_{19}	SR_{19}	Extreme medicine
CC_1	GR_1	Introduction into pharmacy
SC_5	SR_5	Pharmacognosy
SC_{18}	SR_{18}	Pharmacotherapy with pharmacokinetics
SC_{20}	$SR_{20.1,}$	Pharmacology
SC_{12}, SC_{13}, SC_{14}	SR_{12}, $SR_{13.1}$,$SR_{14.1}$	Pharmaceutical chemistry
$SC_{14,}$ SC_{16}	$SR_{14.1}$,SR_{16}	Physical and colloid chemistry
SC_{17}	SR_{17}	Pharmacoeconomics
SC_5	SR_5	Medicinal plants resource study
SC_6, SC_7, SC_8	SR_6,SR_7, SR_8	Organization and economics of pharmacy
SC_{18}, SC_{20}	SR_{18}, $SR_{20.1,}$ $SR_{20.2}$	Clinical pharmacy with pharmaceutical care
SC_6	SR_6	Pharmaceutical and medical merchandising
CC_7, CC_{10}, CC_{11}, SC_9, SC_{10}	GR_7, GR_{10}, SR_{11},SR_9, SR_{10}	Pharmaceutical management and marketing
SC_{15}	SR_{15}	Toxicological and forensic chemistry
SC_{18}	SR_{18}	Biopharmacy
SC_{12}, SC_{13}, SC_{14}	SR_{12}, $SR_{13,}$ $SR_{14.2}$	Pharmaceutical quality system
SC_{13}, SC_{14}	$SR_{13.2,}$ $SR_{14.2}$	Drug standardization
SC_2, SC_3, SC_4	SR_2,SR_3, SR_4	Technology of medicinal cosmetics
SC_2, SC_3, SC_4	SR_2,SR_3, SR_4	Pharmaceutical biotechnology

CC_5,SC_{11}	GR_5,SR_{11}	Social pharmacy
CC_3, CC_{11}	GR_3, GR_{11}	Occupational health and occupational health in the field
SC_1	SR_1	Pharmaceutical law
SC_{19}, SC_{21}	SR_{19},SR_{21}	Training of reserve officers in "Health care". Specialty "Pharmacy"
III. Practical training		
SC19	SR19	First medical aid and introductory medical practice
CC_{12}, SC_5	GR_{12}, SR_5	Field practice in medical botany
CC_7, CC_{10}, CC_{11}, SC_2, SC_3, SC_4, SC_6, SC_7, SC_8, SC_9, SC_{10}, SC_{12}, SC_{13}, SC_{14}, SC_{18}, SC_{20}	GR_7, GR_{10}, GR_{11}, SR_2,SR_3, SR_4, SR_6,SR_7, SR_8 SR_9, SR_{10}, SR_{12}, $SR_{13.1}$, $SR_{14.1}$, SR_{18}, $SR_{20.1}$, $SR_{20.2}$	Pharmaceutical practice
Variative training cycle		
CC_1, CC_2, CC_3, CC_4, CC_5, CC_6, CC_7, CC_8, CC_9, CC_{10}, CC_{11}, CC_{12}	GR_1, GR_2, GR_3, GR_4, GR_5, GR_6, GR_7, GR_8, GR_9, GR_{10}, GR_{11}, GR_{12}	Elective courses *(the list is given in the appendix)*
SC_{14},SC_{17}	$SR_{14.1}$, $SR_{14.2}$, SR_{17}	Elective subjects and practice according to the specialization *(the list is given in the appendix)*

7. VOLUME PROGRAM DISTRIBUTION FOR EDUCATIONAL ACTIVITIES

#	Kind of educational activity	Volume, ESTS credits	Volume, Hours
I. NORMATIVE PART		**267**	**8010**
Humanitarian and socio-economic training			
1.	Ukrainian	6	180
2.	Professional Ukrainian in use	12	360
3.	History of Ukraine and Ukrainian culture	3	90
4.	Philosophy	3	90
	Total	***24***	***720***
Natural and scientific training			
5.	Higher mathematics and statistics	3,5	105
6.	Biological physics with physical methods of analysis	4,5	135
7.	Biology with basics of genetics	4	120
8.	Human anatomy and physiology	5	150
9.	Latin language	3	90
10.	Microbiology with basics of immunology	5	150
11.	Informational technologies in pharmacy	5	150
12.	Pathological physiology	5	150
13.	Organic chemistry	8	240
14.	General and non-organic chemistry	6	180
15.	Analytical chemistry	8	240
16.	Pharmaceutical botany	5	150
17.	Biological chemistry	6	180
18.	Computer modeling in pharmacy	3	90
	Total	***71***	***2130***

Professional training			
19.	Hygiene in pharmacy and ecology	3	90
20.	Ethics and deontology in pharmacy	3	90
21.	Drug technology	12	360
22.	Life safety; basics of bioethics and biosafety	3	90
23.	Extreme medicine	3	90
24.	Introduction into pharmacy	3	90
25.	Pharmacognosy	8,5	255
26.	Pharmacotherapy with pharmacokinetics	6	180
27.	Pharmacology	8,5	255
28.	Pharmaceutical chemistry	13	390
29.	Physical and colloid chemistry	4	120
30.	Pharmacoeconomics	3	90
31.	Medicinal plants resource study	3	90
32.	Organization and economics of pharmacy	6	180
33.	Clinical pharmacy with pharmaceutical care	6	180
34.	Pharmaceutical and medical merchandising	4	120
35.	Pharmaceutical management and marketing	6	180
36.	Toxicological and forensic chemistry	4	120
37.	Biopharmacy	3	90
38.	Pharmaceutical quality system	3	90
39.	Standardization of medicines	3	90
40.	Technology of medicinal cosmetics	3	90
41.	Pharmaceutical biotechnology	3	90
42.	Social pharmacy	3	90
43.	Occupational health in the field	3	90
44.	Pharmaceutical law	3	90
45.	Drug toxicology	3	90
46.	Training of reserve officers in “Health care”. Specialty “Pharmacy”	3	90
	Total	***129***	***3870***
Practical training			
47.	First medical aid and introductory medical practice	3	90
48.	Field practice in medical botany	3	90
49.	Field practice in pharmacognosy	3	90
50.	Practice according to specialization	4	120
51.	Pharmaceutical practice	30	900
	Total	***43***	***1290***
II	**Variative part**	**32**	**960**
	Elective courses *(appendix)*	15	450
	Elective subjects and practice according to specialization	17	510
III	**Physical education**	**0**	**320**
IV	**Attestation**	**1**	**30**
	Total according to the curriculum	**300**	**9320**

8. REQUIREMENTS FOR THE STRUCTURE OF DISCIPLINES AND PRACTICES

The results of the master's studies are determined by the types of training activities, such as the specification of program (integrative) learning outcomes in the curriculum and practice programs, and are used as criteria for selecting the necessary content modules and related learning elements.

The connection of an educational program with training programs by types of educational activities ensures the quality of higher education at the design stage.

The discipline program should also determine the total time for assimilation, the form of final control, the list of basic disciplines, the requirements for information and methodological support, requirements for diagnostic tools and evaluation criteria, and the requirements for the structure of the work program of the discipline.

9. FORMS OF ATTESTATION OF HIGHER EDUCATION TRAINEES

The attestation is carried out by assessing the degree of competence development in the form of a single state qualification examination, which consists of the following components:

- integrated test examination "STEP";
- Professional English exam.

Stages and Compulsory Components of a Unified State Qualification Exam:

The first stage (third year of study)	**The second stage (in the sixth year of study)**
- STEP 1; - English language professional guidance.	- STEP 2;

10. TERMS OF TRAINING

The training is carried out on full-time and part-time bases. Full time training – 5years, part-time – 5 years 6 months

11. STRUCTURAL-LOGICAL SCHEME

Sequence of the applicant's educational activity:

Year of study	**Types of educational activity**
1-st year (60 ECTS credits)	Normative disciplines (50 ECTS credits) Elective Courses (10 ECTS credits)
2-nd year (60 ECTS credits)	Normative disciplines (55 ECTS credits) Elective Courses (5 ECTS credits)
3-rd year (60 ECTS credits)	Normative disciplines (51 ECTS credits) Elective Courses (9 ECTS credits)
4-th year (60 ECTS credits)	Normative disciplines (52 ECTS credits) Elective Courses (8 ECTS credits)
5-th year (60 ECTS credits)	Normative disciplines (60 ECTS credits) Elective Courses (0 ECTS credits)

Sequence of educational activity:

#	**Name of the training subject**	**Distribution according to courses**				
		1	**2**	**3**	**4**	**5**
1.	Ukrainian	*				
2.	Professional Ukrainian in use	*	*	*		
3.	History of Ukraine and Ukrainian culture	*				

4.	Philosophy	*				
5.	Higher mathematics and statistics	*				
6.	Biological physics with physical methods of analysis	*				
7.	Biology with basics of genetics	*				
8.	Human anatomy and physiology	*				
9.	Latin language	*				
10.	Microbiology with basics of immunology		*			
11.	Informational technologies in pharmacy		*			
12.	Pathological physiology		*			
13.	Organic chemistry		*			
14.	General and non-organic chemistry	*				
15.	Analytical chemistry		*			
16.	Pharmaceutical botany		*			
17.	Biological chemistry			*		
18.	Computer modeling in pharmacy			*		
19.	Hygiene in pharmacy and ecology		*			
20.	Ethics and deontology in pharmacy	*				
21.	Drug technology			*	*	
22.	Life safety; basics of bioethics and biosafety	*				
23.	Extreme medicine			*		
24.	Introduction into pharmacy	*				
25.	Pharmacognosy			*		
26.	Pharmacotherapy with pharmacokinetics				*	
27.	Pharmacology			*		
28.	Pharmaceutical chemistry			*	*	*
29.	Physical and colloid chemistry		*			
30.	Pharmacoeconomics				*	
31.	Medicinal plants resource study					*
32.	Organization and economics of pharmacy				*	
33.	Clinical pharmacy with pharmaceutical care				*	*
34.	Pharmaceutical and medical merchandising				*	
35.	Pharmaceutical management and marketing				*	*
36.	Toxicological and forensic chemistry				*	
37.	Biopharmacy					*
38.	Pharmaceutical quality system					*
39.	Standardization of medicines					*
40.	Technology of medicinal cosmetics					*
41.	Pharmaceutical biotechnology					*
42.	Social pharmacy					*
43.	Occupational health in the field				*	
44.	Pharmaceutical law			*		
45.	Drug toxicology				*	
46.	Training of reserve officers in “Health care”. Specialty “Pharmacy”			*		
47.	First medical aid and introductory medical practice		*			
48.	Field practice in medical botany		*			
49.	Field practice in pharmacognosy				*	
50.	Practice according to specialization				*	
51.	Pharmaceutical practice					*
52.	Elective courses	*	*			

53.	Elective subjects and practice according to specialization			*	*	
54.	Physical education	*	*			
55.	Attestation			*		*

12. REQUIREMENTS FOR THE EXISTENCE OF THE INTERNAL SECURITY SYSTEM OF HIGHER EDUCATION

The internal quality assurance of higher education is carried out in accordance with the Provision on the system of quality assurance of educational activities of the University and the quality of higher education (internal quality assurance system) at the Higher State Educational Institution of Ukraine "Bukovinian State Medical University", which provides for the following procedures and measures:

1) definition of principles and procedures for ensuring the quality of higher education;

2) monitoring and periodic review of educational programs;

3) the annual assessment of higher education graduates, scientific and pedagogical and pedagogical staff of the institution of higher education, and the regular publication of the results of such assessments on the official website of the institution of higher education, on information stands and in any other way;

4) ensuring the professional development of pedagogical, scientific and scientific and pedagogical workers;

5) ensuring the availability of the necessary resources for the organization of the educational process, including the independent work of students, for each educational program;

6) ensuring the availability of information systems for the effective management of the educational process;

7) ensuring publicity of information about educational programs, degrees of higher education and qualifications;

8) ensuring an effective system of prevention and detection of academic plagiarism in scientific works of higher education institutions and higher education graduates;

9) other procedures and measures.

The system of providing higher education institutions with quality education and higher education quality (internal quality assurance system) upon submission of higher education institutions is assessed by the National Agency for the Quality Assurance of Higher Education or independent institutions accredited by it for the assessment and quality assurance of higher education on the subject of its compliance with the requirements of the higher quality Education, approved by the National Agency for the Quality Assurance of Higher Education, and International Standards and Recommendations for Ensuring quality of higher education.

13. FINAL PROVISIONS

The educational-professional program is put into effect from 01.09.2019 in accordance with the decision of the academic council of the State Higher Educational Institution of Ukraine "Bukovinian State Medical University" (Minutes No. 9 dated May 23, 2019), is made available on the University's website prior to admission to training in accordance with Rules of admission.

Changes to the educational-professional program are introduced by the heads of the departments to the Central Methodical Commission, which examines them and presents them at the Academic Council of the University. After approval by the academic council, the order of the rector changes are introduced to the educational-professional program of training specialists.

List 1A

Medications affecting the nervous system

Medications affecting the central nervous system *Medications suppressing the nervous system*	
Sedatives	
1. Sodium and Potassium bromides	
Hypnotic	
Derivatives of barbituric acid	
1. Barbital	2. Phenobarbital
3. Pentobarbital	
Derivatives of 1,4-benzodiazepine	
4. Nitrozepam	5. Flunitrazepam
Derivatives of different chemical groups	
6. Bromizoval	7. Zolpidemutartrat
8. Zopiclon	
Analgesics	
Narcotic analgesics	
Derivatives of phenanthrinicosinquinoline of natural origin and their semisynthetic analogues	
9. Morphine hydrochloride	10. Codeine
11. Ethylmorphinehydrochloride	12. Codeine phosphate
Synthetic narcotic analgesics	
13. Trimepiridinehydrochloride	14. Phentanil
15. Tramadolehydrochloride	
Non-narcotic analgesics	
analgesics - antipyretics	
Derivatives of p-aminophenol	
16. Paracetamol	
Pirazolone derivatives	
17. Phenazon	18. Metamizole Sodium salt
non-steroidal anti-inflammatory drugs (NSAIDs)	
Derivatives of pyrazolidinedione	
19. Phenilbutazone	
Salicylic acid derivatives	
20. Sodium salicylate	21. Acetylsalicylic acid
22. Methylsalicylate	
Derivatives of o-aminobenzoic acid (anthranilic acid)	
23. Mephenamine acid	
Derivatives of indolylacetic acid	
24. Indometacine	
Derivatives of phenylacetic acid	
25. Sodium diclophenac	
Derivatives of phenylpropionic acid	
26. Ketoprophen	27. Ibuprophen
Derivatives of benzothiazine	
28. Pyroxicam	29. Meloxicam
Other chemical groups derivatives	
30. Nimesulid	31. Dimethylsulfoxide
Neuroleptics	
Phenotizane derivatives	
32. Chlorpromazinehydrochloride	33. Perphemazin
34. Levomepromazinehydrochloride	35. Triglyoperazine hydrochloride
Derivatives of butyrophenone	
36. Galoperidol	37. Droperidaol

Tranquilizers	
38. Chlordiazepoxide	40. Oxazepam
39. Diazepam	41. Phenazepam
Anticonvulsants	
Antiepileptic drugs	
42. Benzobarbital	43. Primidone
44. Phenytoin	45. Carbamazepine
46. Valproov's acid	
Drugs that are able to eliminate seizures of various origins	
47. Chloralhydrate	
Medicines for the treatment of parkinsonism	
Cholinolytic preparations	
48. Trihexiphenidil hydrochloride (cyclodol)	49. Diphenyltropinhydrochloride (tropacine)
Dopaminergic drugs	
50. Levodopan	51. Amantadine
Means for anesthesia	
Means for inhalation anesthesia	
52. Ether for anesthesia	53. Galotane
Means for non-inhalation anesthesia	
54. Tiopental-sodium	55. Ketamine hydrochloride
Medications that stimulate the central nervous system	
Psychostimulants	
Alkaloids – xanthine derivatives	
56. Caffeine monohydrate	57. Caffeine-Sodium benzoate
Derivatives of phenylalkylamines	
58. Amphetamine sulfate	
Analeptics	
59. Camphor	60. Niketamide
Nootrope preparations	
61. Piracetam	62. Gamma-aminobutyric acid
63. Натрію оксибутират	
Antidepressants	
64. Amitriptyline hydrochloride	65. Imipramine hydrochloride
Medications affecting the peripheral nervous system	
Medications influencing afferent innervation	
Preparations for local anesthesia	
Esters of p-aminobenzoic acid	
66. Benzocaine	67. Tetracaine hydrochloride
68. Procaine hydrochloride	
derivatives of acetanilide	
69. Ledocaine hydrochloride	
Arylamidipiperidinecarboxylic acids	
70. Bupivacaine hydrochloride	71. Articaine hydrochloride
Antacids, enveloping and abrasive preparations	
Aluminum preparations	
72. Aluminium hydroxide	
Magnesium preparations	
73. Magnesium oxide	74. Magnesium carbonate basic
Bismuth preparations	
75. Bismuth nitrate basic	76. Bismuth subcitrate
Sorbents	
77. Activated charcoal	
Antitussive medications of peripheral action	
78. Prenoxidasine	79. Acetylaminonitropropoxybenzene
Expectorants	

Preparations that stimulate expectoration	
80. Terpine hydrate	81. Sodium benzoate

82. Terpin hydrate	83. Sodium benzoate
Mucolytic agents	
84. Acetylcysteine	85. Ambroxole hydrochloride
Irritating agents	
86. Racemic menthol	87. Validol
Medications primarily affecting the efferent part of the nervous system	
Medications acting on the cholinergic receptors	
Cholinomimetics	
88. Pilocarpine hydrochloride	
Anticholinesterase agents	
Anticholinesterase drugs of reverse action	
89. Neostigmine methyl sulfate	
Anticholinesterase drugs of irreversible actions	
90. Armine	
Cholinoblockers (cholinolitics)	
m-cholinoblockers	
91. Atropine sulfate	92. Scopolamine hydrobromide
93. Platyphylline hydrotartrate	
n-Anticholinergics	
94. Pachycarpine hydro iodide	95. Hexametoniumbenzosulfanat
Medications, affecting adrenoreceptors	
Sdrenimimetics	
96. Epinephrine	97. Norepinephrine
98. Phenylphrine hydrochloride	99. Xylometazoline
100. Ephedrine hydrochloride	101. Naphazoline nitrate
102. Clonidine hydrochloride	103. Salbutamol
104. Fenoterol	
Adrenoblockers (adrenolytics)	
105. Propranol hydrochloride	106. Atenolol
Antihistamines	
107. Diphenhydramine hydrochloride	108. Chloropyramine
108. Clemastin	109. Loratidine
109. Promethazin hydrochloride	110. Mebhydrolin
MEDICATIONS AFFECTING ORGANS AND TISSUES	
Drugs from the group of hormones, their analogues and antagonists	
Hormones, amino acid derivatives	
Thyroid hormones	
Drugs that are used in hypofunction of the thyroid gland	
111. Levothyroxine sodium salt	112. Liothyronine sodium salt
113. Potassium iodide	
Drugs that are used in hyperfunction of the thyroid gland.	
114. Thiamazolum	
Hormones-proteins	
Hormones of the pancreas	
115. Insulin	
Synthetic hypoglycemic agents	
Sulfonylureas derivatives	
116. Chlorpropamide	117. Glybenkclamide
Biguanides	
118. Metformine hydrochloride	
Steroid structure hormones	
Hormones of the adrenal cortex and their synthetic analogues	

Mineralocorticosteroids	
119. Desoxycortone	
Glucorticosteroids	
120. Cortisone acetate	121. Hydrocortisone acetate
Synthetic analogues of corticosteroids	
122. Prednisolone	123. Dexamethasone, triamcinolone
124. Flumetasonepivalat	fluocinolone acetone
Female sex hormones and their synthetic analogues	
Estrogenic hormones	
125. Estradiol dipropionate	126. Ethinyl estradiol
127. Diethylstilbestrol, hexestrol	
Progestin hormones	
128. Progesterone, ethisterone	
Androgen hormones and their semi-synthetic analogues	
129. Testosterone propionate	130. Methyltestosterone
Semi-synthetic and synthetic anabolic agents	
Methandienone, nandrolonephenilpropionat	Nandrolone decanoate, methandriol
Medicinal substances from the group of vitamins	
Medicinal substances from the group of water-soluble vitamins	
Ascorbic acid	Calcium pangamate
Calcium Pantothenate	Nicotinic acid
Nicotinamide	Pyridoxine hydrochloride
Thiamine hydrobromide and hydrochloride	Fosfatiamin cocarboxylase
Folic acid	Riboflavin
Methotrexate	Rutizidetrihydrate
Cyanocobalamin	
Medicinal substances from the group of fat-soluble vitamins	
Retinol acetate	Ergocalciferol
129. Menadione sodium bisulfite	Tocopherol acetate
Medications affecting the excretory system	
Saluretics	
129. Chlorthiazide, hydrochlorothiazide	*130.* Furosemide
131. Indapamid	Ethacrynic acid
Aldosterone antagonists (potassium-sparing)	
132. Spironolactone	
Osmotic diuretics	
133. Potassium acetate	
Diuretics – xanthine derivatives	
134. Ammonium chloride	Aminophylline
129. Theophylline, theobromine	
Medications affecting the cardiovascular system	
Cardiotonic agents (cardiac glycosides)	
130. Digoxin	
Anti-anginal agents	
Nitrovasodialators	
131. Glycerin trinitrate solution	Pentaerythritoltetranitrate
Calcium antagonists	
132. Nifedipine 133. Amlodipine	134. Verampil hydrochloride
Antiarrhythmic drugs	
135. Procainomide hydrochloride	Amiodaronum
Antiatherosclerotic agents	
136. Simvastatin, atorvastatin	

Antioxidants.	
137. Methionine	138. Glutamic acid
139. Glycine	
Antihypertensive agents	
Angiotensin converting enzyme (ACE) inhibitors)	
140. Captopril	141. Enalaprilat
Antispasmodics	
142. Papaverine hydrochloride	143. Drotaverine hydrochloride
144. Bendazole	
Medications used for correction of acid-base state and ion balance in the body 145. Sodium hydrocarbonate 146. Hydrochloric acid 147. Calcium salts (calcium chloride, gluconate) **Plasma substituting and detoxification drugs** 148. Sodium chloride **Drugs that stimulate metabolic processes** 149. Methyluracilum 150. Iron sulfate **MEDICATIONS OF ANTIMICROBIAL ACTION** **Chemotherapeutic agents**	
Antibiotics	
Tetracyclines	
151. Tetracycline	152. Oxytetracycline
153. Doxycycline hydrochloride	154. Metacyclogenesis
Chloramphenicoles	
155. Chloramphenicol 156. Soluble Chloramphenicolsuccinate	157. Chloramphenicolustearate
Penicillins	
158. Benzylpenicillin sodium (potassium) salt 159. Ampicillin sodium salt	160. Phenoximethylpenicillin 161. Oxacillin sodium salt
162. Carbencillin salt	163. Amoxicillintrihydrate
Cephalosporins	
164. Cephalexin, cephazoline sodium salt 165. Cefuroxime, cefoxitin 166. Ceftriaxone sodium salt Cefotaxime sodium salt 167. Cefepime, cefpirome	
Carbapenem	
168. Imipenem	
Antibiotics – aminoglycosides	
169. Streptomycin sulfate 170. Canamycinmonosulfate *171.* **Gentamicin sulfate**	
Antibiotics-macrolide	
172. **Erythromycin** 173. **Oleandomycin**	
Lincosamides	
174. Lincomycin hydrochloride	
Polienantibiotics	
175. Nistatinum	
Antibiotics-ansamycin	
176. Rifampicin	

Antitumor antibiotic	
177. Olivomycin 178. Bruneomicin 179. Rubomicin hydrochloride	
Synthetic chemotherapeutic agents	
Sulfanilic acid amide derivatives	
180. Sulfanilamide 181. Sodium sulfacetamide	182. Co-trimoxazole
183. Solasodine	184. Salazopiridazin
185. Sulfetidol	186. Sulfatiazol
187. Sulfadimethoxinum	188. Sulfadimidine
189. Sulfamethoxypyridazine	190. Sulfamethoxypyrazine
191. Sulfamethoxazole	192. Phthalylsulphathiazole
Nitrofuran derivatives	
193. Nitrofural *194.* Nitrofurantoin 195. Furazolidone	
Derivatives of nitroimidazole	
196. Metronidazole	
Derivatives of 8 - hydroxyquinoline	
197. Chinosol 198. Nitroxolinum	
Derivatives of naftiridin and hinolocarbone acids	
199. Nalidixic acid 200. Oxolinic Acid 201. Ofloxacin 202. Norfloxacin 203. Ciprofloxacin hydrochloride 204. Lomefloxacine hydrochloride 205. Pefloxacin	
Antituberculosis drugs	
Derivatives of hydrazideizonicotinic acid	
206. Isoniazid 207. Ftivazidum 208. Opiniated 209. Opiniated soluble	
Pyrazine derivatives	
210. Pyrazinamide	
*Derivatives of aliphatic amines***.**	
211. Etambutol chloride	
Derivatives of p-aminosalicylic acid	
212. Sodium paraaminosalicylate 213. Calcium benzomidosalicylate	
Tioamidizonicotinic acid	
214. Ethionamide	
Antiviral drugs	
Nucleoside analogues	
215. Acyclovir	
Derivatives of adamantane	
216. Rimantadine	
Antiviral drugs of other chemical groups	
217. Oxoline *218.* Oseltamivir 219. Amizon *220.* Arbidol	

Interferons
Drugs for the treatment of cancer
221. Cyclophosphamide 222. Thiotepa 223. Busulfan 224. Mercaptopurine 225. Fluorouracil 226. Tegafur
Anti-malaria treatment
227. Quinine hydrochloride 228. Quinine dihydrochloride 229. Quinine sulfate *230*. Chloroquine 231. Quinocide
Antiseptics and disinfectants
Halogens and Halogen preparations
232. Chloramine 233. Iodine 234. Alcohol solution of iodine 5,10% 235. Triiodmethan
Oxidants
236. Hydrogen peroxide solution 3, 30% 237. Potassium permanganate
Acids and alkalis
238. Benzoic acid 239. Salicylic acid 240. Boric acid 241. Sodium tetraborate
Heavy metal salts
242. Silver nitrate 243. Cuprum sulfate pentahydrate 244. Zinc oxide 245. Zinc sulfate heptahydrate 246. Mercury dichloride
Aldehydes
247. Formaldehyde solution 35% 248. Methenamine
Alcohols
249. Ethanol 96%
Phenols
250. Phenol 251. Resorcin 252. Phenilsalisylat
Coloring materials
253. Ethacridine lactate 254. Diamond green
Detergents
255. Etonium 256. Decamethoxin
Medicinal substances of Sulfur
257. Sulfur for external use

List 1B

1. Medications affecting the nervous system

1. Amitriptyline
2. Articaine
3. Afobazol
4. Valproic acid, sodium valproate
5. Haloperidol
6. Gidazepam
7. Hypericin
8. Hapanthenate calcium
9. Diazepam
10. Doxylamine
11. Droperidol
12. Ethylmethylhydroxypyridine succinate (Mexidol)
13. Zopiclon
14. Carbamazepine
15. Ketamine
16. Clozapine
17. Corvalol
18. Caffeine sodium benzoate
19. Lamotrigine
20. Levodopa
21. Lidocaine
22. Melatonin
23. Tincture of rhizomes with roots of valerian
24. Tincture of ginseng root
25. Sodium bromide
26. Sodium oxybutyrate
27. Nicetamide
28. Nitrazepam
29. Pantocrine
30. Pyracetam
31. Praimaratsetam
32. Procaine hydrochloride
33. Propofol
34. Risperidone
35. Sulfoxamacocain
36. Tolperizon
37. Trihexyphenidyl hydrochloride
38. Fenibut
39. Phenytoin
40. Phenobarbital
41. Fluoxetine
42. Chlorpromazine
43. Citalopram

2. Narcotic, non-narcotic, non-steroidal anti-inflammatory drugs

1. Acetylsalicylic acid
2. Butorphanolatartrate
3. Diclofenac sodium
4. Ibuprofen
5. Indomethacin
6. Codeine phosphate
7. Meloxicam
8. Metamizole sodium
9. Morphine hydrochloride
10. Nimesulide
11. Omnipon
12. Paracetamol
13. Tramadol
14. Trimepyridine
15. Fentanyl
16. Celecoxib

3. Cholinotropic drugs

1. Azamethonium bromide
2. Atropine sulfate
3. Donepezil
4. Neostigmine methyl sulfate
5. Pylocarpine hydrochloride
6. Pepecuronium
7. Pirenzepine
8. Platyphylline hydrotartrate
9. Suxamethonium iodide
10. Tropicamide
11.Cytirizine

4. Adrenotropic drugs

1. Bisoprolol
2. Dobutamine
3. Epinephrine hydrochloride (adrenaline hydrochloride)
4. Xylometazoline
5. Metoprolol
6. Prazosin
7. Propranolol

8. Salbutamol
9. Tamsulosin
10. Phenylephrine hydrochloride

5. Antiallergic medications

1. Diphenhydramine hydrochloride
2. Calcium chloride
3. Cromoglyctic acid
4. Levocetrizine
5. Loratidine
6. Fenspirid

6. Medications affecting the afferent part of the nervous system

1. Activated coal
2. Oak tree bark
3. Leaves of sage
4. Menthol
5. Mustard seeds

7. Medications that affect the gastrointestinal tract

1. Aluminum hydroxide + Magnesium hydroxide (Almagel)
2. Alochol
3. Apototinin
4. Bisacodyl
5. Bismuth subcitrate is colloidal
6. Arginine glutamate (Glutargin)
7. Domperidone
8. Drotaverine hydrochloride
9. Essential phospholipids (Essentiale)
10. Combinations containing Lactobacillus spp., Bifidobacterium sp.
11. Loperamide
12. Metoclopramide
13. Misoprostol
14. Sodium picosulfate
15. Omeprazole
16. Ondansetron
17. Pancreatin (Mezim, Creon)
18. Pantoprazole
19. Silimarin
20. Thiotriazoline
21. Ursodeoxycholic acid
22. Famotidine
23. Flaming

8. Medications affecting the respiratory system

1. Ambroxol
2. Aminophylline
3. Acetylcysteine
4. Beclomethasone
5. Glaucine
6. Oximethazoline

9. Diuretics, urogenisceptics and antihistamines

1. Alopurinol
2. Acetazolamide
3. Blemaren
4. Hydrochlorothiazide
5. Lespenephril
6. The leaves of the martyr
7. Mannitol
8. Spironolactone
9. Urolesan
10. Furosemide

10. Hormones, hormonal antagonists and synthetic hypoglycemic agents

1. Acarbose
2. Budesonide
3. Hydrocortisone
4. Glibenclamide
5. Glyclazide
6. Danazol
7. Deoxykorticosterone acetate (DOXA)
8. Dexamethasone
9. Desmopressin
10. Estron
11. Ethinylestradiol + dienogest (Zhanin)
12. Insulin

13. Levonorgestrel
14. Levothyroxine
15. Mercazolol
16. Metformin
17. Mifepristone
18. Mometasone fluoroate
19. Nandrolone
20. Noritusteron (Primolut-Nor)
21. Oxytocin
22. Parathyroidin
23. Prednisolone
24. Progesterone
25. Rosiglitazone
26. Tamoxifen
27. Testosterone propionate
28. Three-regol
29.Finasteride

11. Vitamins and drugs for the treatment of osteoporosis

1. Ascorbic acid
2. Alendronate sodium
3. Vikasol
4. Ergocalciferol
5. Zoladronic acid
6. Calcium carbonate
7. Nicotinic acid
8. Pyridoxine hydrochloride
9. Thiamine hydrochloride
10. Tocopherol acetate
11. Folic acid
12. Tsiankobalamin

12. Medications that affect the cerebral circulation, anti-migraine preparations

1. Vinpocetine
2. Nimodipine
3. Nitsergolin
4. Sumatriptan
5. Cinnarzin
6. Citicoline

13. Medications that affect blood

1. Alteplase
2. Aminocaproic acid
11. Atenococarol
3. Warfarin
4. Heparin
5. Dipyridamole
6. Erythropoietin-recombinant
7. Iron hydroxy-poly-molithic complex
8. Iron sulfate
9. Iron fumarate
10. Clopidogrel
12. Methyluracil
13. Silent
14. Nastroparin calcium
15. Pentoxifylline
16. Streptokinase
17. Ticlopidine
18. Fennindion
19.Fibrinolysin

14. Immunomodulators

1. Benzazole
2. Interferon alpha
3. Interferon is pegylated
4. Tiloron

15. Antitoxic drugs, antidotes

1. Dextrose (glucose)
2. Deferoxamine
3. Naloxon
4. Protamine sulafte
5. Unitiol
6. Flumasenil

16. Антибактеріальні засоби

1. Azithromycin
2. Aztreonam
3. Amikatsina sulfate
4. Amoxicillin + clavulanate
5. Benzylpenicillin sodium, procaine salt
6. Vancomycin
7. Gentamicin
8. Doxycycline
9. Ethambutol
10. Isoniazid
11. Imipenem + cilastatin
12. Carbenicillin

13. Clarithromycin
14. Levofloxacin
15. Linzolid
16. Lincomycin
17. Moxifloxacin
18. Nitroxoline
19. Nifuroxazide
20. Pepemidic acid
21. Rifampicin
22. Roxithromycin
23. Streptomycin
24. Sulfamethoxazole + trimethoprim
25. Sulfasalazine
26. Sulfatsil sodium
27. Tetracycline hydrochloride
28. Ticarcinol
29. Phosphomycin
30. Phthalylsulfathiazole
31. Fuzafungin
32. Chloramphenicol
33. Cefazolin
34. Cefiim
35. Ceftriaxone
36. Cefuroxime
37. Ciprofloxacin

17. Antiviral medications

1. Zidovudin
2. Acyclovir
3. Valacyclovir
4. Zanamivir
5. Oseltamivir
6. Oxolin
7. Ribavirin
8. Rimantadine (Remantadine)
9. Ritonavir

18. Anti-parasitic (antiprotozoal, anti-helminthic, insecticidal and acaricidal), antisyphilitic

1. Albendazole
2. Benzyl benzoate
3. Bihoinol
4. Malathion + permethrin + piperonylbutoxide (Pair Plus)
5. Mebendazole
6. Metronidazole
7. Pirantel
8. Praziquantel
9. Tinidazole
10. Chloxed
11. Chlorochine

19. Antifungial grugs

1. Amphotericin B.
2. Grisiofulvin
3. Ketoconazole
4. Miconazole
5. Natamycin
6. Naphthyphine
7. Nystatin
8. Terbinafine
9. Undecylenic acid
10. Fluconazole

20. Antiseptics and disinfectors

1. Brilliant green
2. Potassium permanganate
3. Peroxide of hydrogen
4. Povidon-iodine
5. Alcohol solution of iodine
6. Ethyl alcohol
7. Furacillin
8. Chloramine B.
9. Chlorhexidine
10. Chlorophyllipte

21. Cytostatics

1. Azatioprin
2. Busulfan
3. Vincristine
4. Doxorubicin
5. L-asparaginase
6. Methotrexate
7. Topotecan
8. Trastuzumab
9. Cyclophosphamide
10. Cisplatinum

22. Radioprotectors

1. Cystamin

LIST 2

1. Apricot gum, seeds, oil
2. The leaves of agave
3. Calamus rhizomes
4. Acacia catech wood extract (catech)
5. Acacia Senegal gum
6. Pharmaceutical aconite tubers
7. Aconite white grass
8. Aconite Jungar fresh grass
9. Shark liver, fat
10. Aloe Vera fresh leaves
11. Marshmallow root, grass, leaves (Althea officinalis, Althea Armenian)
12. Ambergris
13. Ammi major fruits
14. Pineapple fruits, juice
15. Star anise fruits, oil
16. Anise fruits, oil
17. Aralia roots
18. Peanut seeds, oil
19. Argan seeds, oil
20. Arnica flowers, oil
21. Chokeberry fresh fruits
22. Artichoke leaves
23. Ascofilum knotty
24. Astragalus gum
25. Astragalus grass
26. Cotton wool, seeds, oil
27. Rosemary marsh sprouts, oil
28. Bergenia rhizomes
29. Barberry leaves, roots, fruits
30. Periwinkle grass
31. Belladonna leaves, grass, roots
32. Birch buds, leaves, mushroom, oil
33. Henbane leaves
34. Bean tree leaves
35. Spongilla
36. Boswellia resin (incense)
37. Cowberry leaves
38. Elder flowers
39. Flowers of elderberry herbaceous
40. Clover grass
41. Beet roots
42. Valerian rhizomes with roots, oil
43. Cornflowers real grass
44. Willow bark
45. Grape fruits
46. Alder fruits
47. Beeswax, Carnauba
48. Visnage ammi fruits
49. Harrow roots
50. Cornflower blue flowers
51. Filipendula herbs
52. Galas Turkish, Chinese, pistachio
53. Hamamelis leaves, bark
54. Pumpkin seeds, oil, fruits
55. Dianthus
56. Hibiscus flowers
57. The Goldenseal rhizome
58. Ginkgo leaves
59. Tulopilus grass
60. Kidney tulopilus grass
61. Mustard seeds
62. Nupher lutea rhizomes
63. Hawthorn leaves and flowers, fruits
64. Spring Adonis herbs
65. Rowan fruits
66. Pomegranate tree bark, peel, fruits
67. Buckwheat grass
68. Shepherd's purse herb
69. Guarana pasta
70. Trigonella seeds
71. Dolphin grass
72. Yarrow grass
73. Dioscorea rhizomes and roots
74. Dryopteris rhizomes
75. Oak bark
76. The Indian Datura seed
77. Datura leaves
78. Angelica rhizomes and roots
79. Eucalyptus leaves, oil
80. Eleutherococcus rhizomes and roots
81. Evening primrose seeds, oil
82. Ervy woolly grass
83. Ephedra grass
84. The roots of Echinacea pallida
85. Echinacea angustifolia roots
86. Of Echinacea purpurea roots, the grass
87. Ginseng roots
88. Comfrey roots
89. Wide-leaved senecio rhizome with roots, grass
90. Erysimum hieraciifolium fresh herbs
91. Medical bile preserved
92. Jojoba oil
93. Zhostera fruits
94. Cranberry fruit
95. Phlomoides herbs
96. Hypericum herbs
97. Bistorta rhisomes
98. Centaurium herbs
99. Scrofula grass
100. Yohimbe bark
101. Hedgehog grass
102. Ginger rhizomes, oil
103. Ipecacchuana roots
104. Coffee seeds
105. Watermelon seeds, fruits
106. Kalanchoe shoots fresh

107. Viburnum bark, fruit
108. Compareelements (Mirra)
109. Camphor wood, oil, camphor
110. Cabbage leaves
111. broccoli inflorescence
112. Potato tubers, starch
113. Cascara bark
114. Catharanthus roseus grass
115. Chestnut seeds, leaves
116. American chestnut leaves
117. Beans of usual fold
118. Cumin fruits, oil
119. Coca leaf
120. Coconut fruit, oil
121. Cola seeds
122. Lilies of the valley grass, leaves, flowers
123. Hemp grass
124. Cinnamon tree bark, oil
125. Coriander fruits, oil
126. Blood of cattle, small cattle, pigs
127. Nettle roots
128. Nettle leaves
129. Dill fragrant fruits, oil
130. Buckthorn bark
131. Corn kernels, starch, oil, columns with stigmas
132. Dandelion roots, grass with roots
133. Sesame seeds, oil
134. Curare
135. Turmeric rhizomes, oil
136. Lavender flowers, oil
137. The leaves of cherry Laurel
138. Laurel leaves, fruits, oil
139. Lacquer secret component – shellac resin
140. Laminariae of the strata
141. Lanolin
142. Rhaponticum rhizomes with roots
143. Lemon peel, fruit, oil
144. Lemongrass fruits, seeds
145. Linden flowers
146. Lquab Eastern balsam (storaks)
147. Lobelia herb
148. Burdock roots
149. Onions picturesque bulbs
150. Lovage roots, oil
151. Alfalfa grass
152. Flax seeds, oil
153. Peppermint leaves, oil
154. Makley grass
155. Poppy boxes, opium
156. Raspberry fruit, leaves
157. Mallow leaves, flowers
158. Marena rhizomes and roots
159. Olives fruits, oil
160. Oregano grass, oil
161. leaves of Butterbur
162. Royal jelly (apilak)
163. yellow poppy grass
164. Honey
165. Lemon balm leaves, oil
166. Almond seeds, oil
167. The soapwort rhizome
168. Myroxylon balsamic balsam (balsam of Peru)
169. Maxilopalatine balm (balsam Tolu)
170. Wild carrots fruit
171. Mumie
172. Amanita body
173. Bearberry leaves
174. Calendula flowers
175. Digitalis leaves (digitalis purpurea, digitalis grandiflora)
176. Digitalis woolly leaves
177. Sea buckthorn fruits
178. The bee pollen
179. Borage medicinal herb
180. The oleander leaves
181. Elecampane rhizomes and roots, oil
182. Mistletoe shoots
183. Oplopanax rhizomes with roots
184. Orthosiphon leaves
185. Bee venom, snake
186. Leeches secret saliva
187. Palm oil
188. Antlers of maral, red deer, spotted deer
189. Papaya fruit and leaves, dried milky juice
190. Parmelia of the strata
191. Passiflora herb
192. Nightshade lobed grass
193. The fruits of the parsnip
194. Primrose rhizomes with roots
195. Ambrosia
196. Piretruma flower
197. Peach seeds, oil
198. Cinquefoil rhizomes
199. Pepper fruits
200. Parsley fruit, oil
201. Tansy flowers
202. Peony herb, rhizomes and roots
203. Corms fresh
204. Plow sheep grass
205. Ivy leaves
206. Plantain flea seeds
207. Plantain large leaves
208. Plantain large leaves
209. Podofila rhizomes with roots
210. Wormwood bitter grass, oil
211. Sagebrush common grass
212. Love grass
213. Propolis
214. Psilocybe fruit body
215. Wheat grains, starch, germ, oil
216. Ratania roots
217. The roots of rauwolfia

218. Rhubarb roots, leaves
219. Fish oil
220. Roman chamomile flowers, oil
221. Rice grains, starch
222. Castor seed oil
223. Rhizomes and roots of Rhodiola
224. Burnet rhizomes and roots
225. Rosemary leaves, oil
226. Milk Thistle fruit
227. Sweet-scented flower daisies, oil
228. Chamomile flowers, oil
229. Rhizomes of needle
230. Fumaria herbs
231. Nutria lard
232. Pork lard
233. Securinega shoots
234. Senega roots
235. Senna leaves, fruit
236. Serena fruit
237. Cyanosis rhizomes with roots
238. Scopolia rhizomes
239. Common smoke tree leaves
240. African plum bark
241. The common Fig tree leaves, fruits
242. Currant leaves, fruits
243. Motherwort grass
244. Soybean seeds, oil
245. Licorice roots
246. Licorice grass
247. Sunflower seeds, oil
248. Pine buds, needles, tar, coal, turpentine, rosin, oleoresin
249. Sophora thick grass
250. Sophora japonica buds, fruits
251. Spermaceti
252. Spirulina.
253. Ergot
254. Knotweed grass
255. Stevia leaves
256. Stephanie's smooth tubers with roots
257. Styrax
258. Styrax benzoin balsamic resin (benzoin or styrax)
259. The strophanthus seeds
260. Sumac leaves, fruit
261. Strawberry fruit, leaves
262. Dried marsh grass
263. The tamarind fruit
264. Thermopsis herbs, seeds (thermopsis lanceolate)
265. Gentian root
266. Jerusalem artichoke tubers
267. Black poplar buds, oil
268. Rose petals, oil
269. Fennel bitter fruit, sweet fruit, oil
270. Violet herb (viola tricolor, field Pansy)
271. Viola tricolor flowering aerial parts
272. Horsetail grass
273. Cinchona tree bark
274. Hops, oil
275. Onion bulbs
276. Chicory roots
277. The black cohosh rhizomes and roots
278. Scintilla Asian grass
279. Cetraria thallus Icelandic
280. Citrus fruit
281. Immortelle flowers
282. Garlic bulbs
283. Tea leaves
284. Thyme vulgaris herb
285. Thyme grass
286. Hellebore rhizomes with roots
287. Hellebore rhizomes with roots
288. Turns grass
289. Bird cherry fruit
290. Celandine seeds
291. Celandine herb.
292. Blueberries fresh fruits, dried fruits, leaves
293. Nigella seeds
294. Sage leaves, oil
295. Rosehip fruit
296. Chocolate tree seeds oil
297. The Baikal skullcap roots
298. Spinach leaves
299. The sour sorrel leaves
300. Sorrel horse roots
301. Yuki leaves
302. Apple fruits
303. The Tribulus terrestris herb
304. Fir shoots, balm
305. Juniper fruit
306. Walnut leaf, seeds,
307. Wheatgrass creeping rhizomes
308. Oats seeded grass, embryos
309. Locust pseudoacacia flowers
310. Wonders flowers
311. Amorphous bushy fruit

LIST 3
Solid forms of medications

1. Powders
2. Aspersions and powders

3. Medicinal teas
4. Soluble teas
5. Tablets (uncoated, coated, triturated, framed, magnetic etc.)
6. Granules
7. Capsules (soft, hard)
8. Microcapsules
9. Dragee
10. Troche
11. Pastilles
12. Spansules

Liquid forms of medications:

13. Water solutions
14. Mixtures
15. Alcohol solutions
16. Glycerin solutions
17. Oil solutions
18. High molecular solutions (HMC)
19. Protected colloid solutions
20. Suspensions
21. Emulsions
22. Extractions
23. Decoctions
24. Mucilage
25. Drops
26. Aromatic waters
27. Syrups

Extraction medicines:

28. Tinctures
29. Extracts (liquid, thick, dry)
30. Maximally purified preparations and individual substance preparations
31. Biogenic plant preparations
32. Biogenic animal preparations
33. Biogenic mineral preparations
34. Hormone preparations
35. Enzymes and higher plants' preparations
36. Thick and dry juices, fresh plant raw material extraction preparations

Semisolid forms of medications:

37. Liniments
38. Different ointments
39. Creams
40. Gels
41. Pastes
42. medical plasters
43. medical pencils
44. Mustard plasters
45. Different kinds of suppositories, sticks
46. Rectolites
47. Pills

Sterile and aseptically manufactured dosage forms:

48. For parenteral use: water, oil infusion solutions, microsurfaces, emulsions, powders, pills
49. Ophthalmic dosage forms: drops (water, oil), suspensions, ointments, films
50. Medicines for newborns and children under 1 year
51. Medicinal forms with antibiotics
52. Intravenous preparations (concentrated solutions, semi-finished products)
53. Homeopathic dosage forms
54. Veterinary dosage forms
55. Aerosol dosage forms
56. Biotechnological products (immune drugs, serums, vaccines, enzymes of microbiological synthesis, normobiotics, immobilized enzymes, vitamins, antibiotics).

Medicinal forms of the new generation

57. Therapeutic systems of various types of prolonged action (TTS)
58. Liposomes
59. Microspheres

Appendix

Elective courses, elective subjects and practice according to specialization

Yeas of study (coursee)	Name of the elective courses
Elective courses	
I, II	1. Psychology of communication. 2. Modern civilization and culture. 3. Modern problems of molecular biology. 4. European computer literacy standard. 5. Cellular biology. 6. Valeology. 7. The theory and practice of professional communication. 8. Religious studies. 9. Logic, formal logic. 10. Fundamentals of pedagogy. 11. Aesthetics. 12. Ethics. 13. The theory of knowledge and pharmacy. 14. Ethical problems in pharmacy. 15. Fundamentals of social psychology. 16. Functional biochemistry. 17. Dermatology. 18. Psychology. 19. Basics of Christian Ethics and Morality. 20. Aromology in cosmetology and aromatherapy. 21. Pharmaceutical aspects of nutritionology (biologically active dietary supplements). 22. Communication training. 23. Fundamentals of modern homeopathy. 24. Theoretical foundations of synthesis and the relationship between the structure and action of drugs. 25. Modern methods of biological systems. 26. Perfumery and cosmetics. 27. Chemico-toxicological analysis. 28. Development of drugs. 29. Fundamentals of evidence-based medicine. 30. Toxicology of drugs. 31. English language.
Elective subjects and practice according to specialization	
III	Basics of economy; homeopathic remedies; immune prophylaxis of infectious diseases; physico-chemical analysis in the creation of drugs; pharmaceutical aspects of toxicomania and drug addiction;
IV	Practice on drug technology. Disciplines in specialty: intellectual property; side effects of drugs; pharmacoeconomics; laboratory diagnostics; the basics of insurance medicine;