

KYIV INTERNATIONAL UNIVERSITY

EDUCATIONAL AND PROFESSIONAL PROGRAM

"Medicine»

second (master's) level of higher education

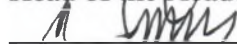
**in specialty 222 Medicine
fields of knowledge 22 Health care**

Qualification: Master of Medicine

APPROVED

Academic council of KyMU

Head of the Academic Council of KyMU

 prof. MIN. Khachaturian

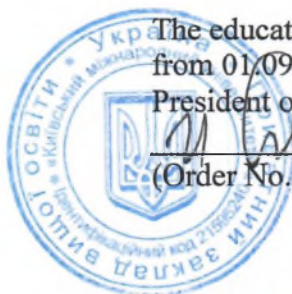
(protocol No. 11 dated 24.06.2022)

The educational program is put into effect
from 01.09.2022

President of KyMU

 prof. MIN. Khachaturian

(Order No. 140 dated 06/24/2022)



Kyiv 2022

PREFACE

Educational and professional program - a system of educational components at the appropriate level of higher education within the specialty, which determines the requirements for the level of education of persons who can start studying under this program, the list of academic disciplines and the logical sequence of their study, the number of ECTS credits necessary to fulfill this programs, as well as the expected learning outcomes (competencies), which must be mastered by a higher education master's degree holder.

During the development of OPP "Medicine", the standard of higher education of the second (master's) level, field of knowledge 22 "Health care", specialty 222 "Medicine" was taken into account. Approved and put into effect by the order of the Ministry of Education and Science of Ukraine dated November 8, 2021 No. 1197.

Educational and professional program "Medicine" of the second (master's) level of higher education specialty 222 "Medicine" field of knowledge 22 "Health care" developed by the project group of the Educational and Scientific Medical Institute of Kyiv International University, consisting of:

Drozdova Iryna Volodymyrivna, doctor of medical sciences, professor, head departments of clinical disciplines and nursing;

Pavlovska Marina Oleksandrivna, doctor of medical sciences, associate professor, director of NNMI;

Girin Leonid Volodymyrovych, candidate of medical sciences, head of the department of general medicine

Reviewers:

Viktor Anatoliyovych Chernyak, doctor of medical sciences, professor, director of the university clinic of Kyiv National University named after Taras Shevchenko;

Yuriy Ivanovich Gladush, candidate of medical sciences, associate professor, medical director of City Doctor Medical Center.

**1. Profile of the educational and professional program "Medicine"
from specialty 222 "Medicine"
fields of knowledge 22 "Health care"**

1 - General information	
Full name of the higher education institution and structural unit	Private institution of higher education "Kyiv International University" Educational and Scientific Medical Institute Department of General Medicine Department of clinical disciplines and nursing
The degree of the higher world	Master's degree
Branch of knowledge	22 Health care
Specialty	222 Medicine
Form of education	Training is carried out only in the full-time form of education
Educational qualification	Master of Medicine
Qualification in diploma	Degree of higher education - master's degree Specialty - 222 Medicine Specialization - (specify the name of specialization if available) Professional qualification - doctor
Additional requirements for admission rules	
Description of the subject area	<i>Object of study and/or activity of medicine:</i> prevention, diagnosis and treatment of human diseases, the impact of health problems on patients, their families and the population, health maintenance. <i>Learning objectives:</i> acquiring the ability to solve complex tasks and problems, including those of a research and innovation nature, in the field of medicine. Ability to continue learning with a high degree of autonomy. <i>Theoretical content of the subject area:</i> concepts, principles and theories of prevention, diagnosis and treatment of human diseases at the individual, family and population levels. <i>Methods, techniques and technologies:</i> anamnestic, clinical, laboratory, instrumental methods of carrying out the diagnostic process, determination of leading symptoms and syndromes, determination of preliminary and clinical diagnosis; technologies of diagnosis, treatment and prevention, management and organization of work in the field of health care.

	<i>Tools and equipment:</i> modern diagnostic, therapeutic and other devices, objects and devices used in professional activities.
Academic rights of graduates	Acquisition of additional qualifications and medical specializations in the system of adult education, in particular in internship. Obtaining an education at the third (educational and scientific) level of higher education.
Availability of accreditation	Accreditation of specialties 222 "Medicine" 22 "Health care" in 2022, according to the expert opinion of the industry expert council on the accreditation of the educational program "Medicine" dated January 26, 2022.
Cycle/level	The second cycle of higher education Qualifications Framework of the European Higher Education Area; Level 7 of the NRC of Ukraine
Prerequisites	Competitive selection is carried out: for admission to the first course - on the basis of complete general secondary education according to the results of the external examination; admission to the second year - on the basis of the educational and qualification level of a junior specialist and/or a previously obtained degree of higher education based on the results of the entrance exams.
Language(s) of instruction	Ukrainian
The term of validity of the educational program	Until the next review of the OPP in accordance with the "Regulations on the Organization of the Educational Process at the PZVO "Kyiv International University"
Internet address of the permanent placement of the description of the educational program	www.kymu.edu.ua

2 - The purpose of the educational program

To ensure general cultural and professionally oriented training of the applicant in the field of higher education, to determine the amount of special knowledge, abilities and skills sufficient for solving complex specialized tasks and practical problems of the specialist's activity in the field of medicine, including provision of medical and preventive care to the population, diagnosis, differential diagnosis, treatment, rehabilitation and dispensation of patients, provision of rapid and emergency medical care in accordance with clinical protocols, assessment of the impact of dangerous factors on the risk of developing the most common diseases.

Features of OPP "Medicine": training of highly professional clinically oriented medical specialists who are able to actively and effectively use the acquired knowledge, think critically and analytically, manage resources and work in

accordance with the principles of patient safety, by acquiring a high level of knowledge and practical skills in providing medical and preventive care to the population, diagnostics, differential diagnosis, treatment, rehabilitation and dispensation of patients, provision of rapid and emergency medical care in accordance with clinical protocols, assessment of the impact of dangerous factors on the risk of developing the most common diseases, able to use innovative technologies of diagnosis and treatment, achievements of medical science.

3 – Characteristics of the educational program

Subject area (field of knowledge, specialty, specialization (if available))	Branch of knowledge 22 "Health care" Specialty 222 "Medicine"
Orientation of the educational program	Educational and professional
The main focus of the educational program and specialization	Training in the field of knowledge 22 "Health care" in the specialty 222 "Medicine" Emphasis is placed on the formation and development of professional competencies in the field of medicine. Keywords: master's degree, medicine, health care, doctor
Justification of the program	In the current conditions of social and economic transformations, higher medical education should provide high-quality training of applicants and be an important component of reforming the health care sector, implementing the social priorities of the state, since the quality of providing medical services to the population of the country depends on the level of training of future specialists in the field of health care . The modern development of science and practice makes it necessary to make adjustments to the training and upgrading of the qualifications of medical workers, bringing their education closer to international standards. Analytical studies have proven that the system of training medical personnel, in particular masters of medicine, in combination with the system of their rational and effective use, should perform the functions of providing the population with highly qualified medical care. The need to correct the educational medical model, from the point of view of updating the principles of training, is dictated by the need for innovative changes in the process of obtaining modern education in institutions of higher education, on the basis of which specialists are trained specifically in the specialty "Medicine". Issues of ensuring the quality of education and professional training of doctors, creating

	favorable conditions for their education and professional development throughout life, and improving the effectiveness of the interaction between the medical education system and the labor market are also becoming relevant.
Features of the program	About Object of activity: preservation of health, prevention and treatment of human diseases. Learning goals: Formation of the ability to apply the acquired knowledge, skills, abilities and understanding from humanitarian, fundamental and professionally oriented disciplines to solve typical tasks of a doctor in the field of health care in the relevant position, the scope of which is provided by the specified lists of syndromes and symptoms of diseases, physiological conditions and somatic diseases, which require special patient management tactics, emergency conditions, laboratory and instrumental research, medical research. Theoretical content of the subject area: make up normative and selective educational components of cycles of general and professional training. Methods, techniques and technologies: the graduate must possess professional knowledge and be able to carry out the diagnostic process, determine the leading symptoms and syndromes, determine the preliminary diagnosis, carry out differential diagnosis, formulate the final clinical diagnosis of diseases under the supervision of the supervising physician, know the principles of treatment and prevention of diseases, carry out the treatment of major diseases by adopting a well-founded solutions according to existing algorithms. Tools and equipment (objects/items, devices and appliances that a student of higher education learns to apply and use): The graduate must use modern diagnostic, therapeutic and other devices, items and devices for carrying out professional activities: surgical instruments, electrocardiograph, echocardiograph, angiograph, pneumograph, endoscope, x-ray machine, ultrasound machine, pH meter, photoelectrocolorimeter, spectrophotometer, biochemical analyzer, microscope, dosimeter, luxmeter, etc.
4 – Eligibility of graduates to employment and further education	
Suitability for employment	The specialist is prepared to work according to DK 009-2010: Section Q. Health care and provision of social assistance

	Chapter 86. Health care Group 86.1 Activities of hospital institutions Class 86.10 Activities of hospital institutions Group 86.2 Medical and dental practice Class 86.21 General medical practice Class 86.22 Specialized medical practice Group 86.9 Other activities in the field of health care Class 86.90 Other health care activities After graduating from the Master's degree in Medicine, the specialist is able to perform professional work: intern physician (KP code – 3229); trainee doctor (KP code - 3221);
Further education	For further professional training in the specialty "Medicine", a specialist must enroll in postgraduate education programs - internships (primary specialization), where training is carried out according to educational programs in a certain specialty, and can also enroll in an educational and scientific program for obtaining the degree of Doctor of Philosophy. After training in an internship, residency, a specialist is assigned the qualification of a doctor who is able to perform the professional work specified in DC 003:2010 and can hold the corresponding medical position: Class 222 Professionals in the field of medicine (except nurses). Subclass 2221 Professionals in the medical field (except stomatology). Group 2221.2 Doctors. Subclass 2225 Professionals in the field of preventive medicine. Group 2225.2 Doctors, specialists in the field of medical and preventive medicine. Group 2229.2 Medical professionals (except nursing and midwifery). In the future, specialists can undergo retraining and training in cycles of secondary specialization, and acquire another medical specialty and perform relevant types of professional activity. The growth of professional skill will ensure the continuous professional development of doctors in cycles of thematic improvement, information and internship, and other types of postgraduate education.
5 – Teaching and assessment	
Teaching and learning	Lectures, seminars, practical classes in small groups, practice, consultations with teachers. Student-centered learning, self-learning, problem-oriented learning, learning through industrial practice
Assessment	Tests, differentiated tests, final module tests, oral and written exams, certification in the form of a unified state

	qualification exam (SEC) and an objective structured clinical exam
6 – Software competencies	
Integral competence	
The ability to solve complex problems, including those of a research and innovation nature in the field of medicine. Ability to continue learning with a high degree of autonomy.	
General competences (CG)	
ZK 01	Ability to abstract thinking, analysis and synthesis.
ZK 02	Ability to learn and master modern knowledge.
ZK 03	Ability to apply knowledge in practical situations.
ZK 04	Knowledge and understanding of the subject area and understanding of 9 professional activities.
ZK 05	Ability to adapt and act in a new situation.
ZK 06	Ability to make informed decisions.
ZK 07	Ability to work in a team.
ZK 08	Ability to interpersonal interaction.
ZK 09	Ability to communicate in a foreign language.
ZK 10	Ability to use information and communication technologies.
ZK 11	Ability to search, process and analyze information from various sources.
ZK 12	Determination and persistence in relation to assigned tasks and assumed responsibilities.
ZK 13	Awareness of equal opportunities and gender issues.
ZK 14	The ability to realize one's rights and responsibilities as a member of society, to realize the values of a civil (free democratic) society and the need for its sustainable development, the rule of law, the rights and freedoms of a person and a citizen in Ukraine.
ZK 15	The ability to preserve and multiply moral, cultural, scientific values and achievements of society based on understanding the history and patterns of development of the subject area, its place in the general system of knowledge about nature and society and in the development of society, technology and technologies, to use various types and forms of motor activity for active recreation and leading a healthy lifestyle.
Special (professional, subject) competences	
SC 01	The ability to collect medical information about the patient and analyze clinical data.
SC 02	Ability to determine the necessary list laboratory and instrumental studies and their assessment results
SK 03	Ability to establish preliminary and clinical diagnosis of the disease

SC 04	The ability to determine the necessary work regime and rest in the treatment and prevention of diseases.
SC 05	The ability to determine the nature of food at treatment and prevention of diseases.
SK 06	Ability to determine the principles and nature of treatment and prevention of diseases.
SK 07	Ability to diagnose emergency conditions.
SK 08	Ability to determine tactics and provide emergency medical assistance
SK 09	Willingness to carry out medical evacuation measures.
SK 10	Ability to perform medical manipulations.
SC 11	Ability to solve medical problems in new or unfamiliar environments in the presence of incomplete or limited information, taking into account aspects of social and ethical responsibility.
SK 12	The ability to determine the tactics of physiological pregnancy, physiological childbirth and the postpartum period. Family planning counseling skills and contraceptive method selection.
SK 13	Ability to carry out sanitary and hygienic and preventive measures.
SK 14	Ability to plan and carry out preventive and anti-epidemic measures for infectious diseases.
SK 15	The ability to conduct an examination of working capacity.
SK 16	Ability to maintain medical documentation, including electronic forms.
SK 17	The ability to assess the impact of the environment, socio-economic and biological determinants on the state of health of an individual, family, population.
SK 18	.Ability to analyze the activity of a doctor, unit, health care institution, ensure the quality of medical care and increase the efficiency of the use of medical resources.
SK 19	The ability to organize and integrate the provision of medical assistance to the population and the marketing of medical services.
SK 20	Ability to conduct epidemiological and medical-statistical studies of the health of the population; processing of social, economic and medical information.
SC 21	It is clear and unambiguous to convey one's own knowledge, conclusions and arguments on health care problems and related issues to specialists and non-specialists, in particular to people who are studying.
SK 22	Ability to manage healthcare workflows that are complex, unpredictable and require new strategic approaches
SK 23	The ability to develop and implement scientific and applied projects in the field of health care
SK 24	Adherence to ethical principles when working with patients and laboratory animals.

SK 25	Adherence to professional and academic integrity, to be responsible for the reliability of the obtained scientific results
SK 26	Ability to carry out scientific and/or scientific-pedagogical activities in the field of health care.
The normative content of the training of higher education applicants, formulated in terms of learning outcomes	
1	Have thorough knowledge of the structure of professional activity. To be able to carry out professional activities that require updating and integration of knowledge. To be responsible for professional development, the ability for further professional training with a high level of autonomy.
2	Understanding and knowledge of fundamental and clinical biomedical sciences, at a level sufficient for solving professional tasks in the field of health care.
3	Specialized conceptual knowledge, which includes scientific achievements in the field of health care and is the basis for conducting research, critical understanding of problems in the field of medicine and related interdisciplinary problems.
4	Identify and identify leading clinical symptoms and syndromes (according to list 1); according to standard methods, using preliminary data of the patient's history, data of the patient's examination, knowledge about the person, his organs and systems, establish a preliminary clinical diagnosis of the disease (according to list 2).
5	Collect complaints, history of life and diseases, evaluate psychomotor and physical development of the patient, state of organs and systems of the body, based on the results of laboratory and instrumental studies, evaluate information regarding the diagnosis (according to list 4), taking into account the age of the patient.
6	Establish the final clinical diagnosis by making a reasoned decision and analyzing the received subjective and objective data of clinical, additional examination, differential diagnosis, observing the relevant ethical and legal norms, under the control of the head physician in the conditions of the health care institution (according to list 2) .
7	Assign and analyze additional (mandatory and optional) examination methods (laboratory, functional and/or instrumental) (according to list 4), patients with diseases of organs and body systems for differential diagnosis of diseases (according to list 2)
8	Determine the main clinical syndrome or what determines the severity of the condition of the victim/injured (according to list 3) by making a reasoned decision and assessing the person's condition under any circumstances (in the conditions of a health care institution, outside its borders), including in conditions of emergency and hostilities, in field conditions, in conditions of lack of information and limited time.

9	Determine the nature and principles of treatment (conservative, operative) of patients with diseases (according to list 2), taking into account the age of the patient, in the conditions of a health care institution, outside its borders and at the stages of medical evacuation, including in field conditions, on the basis of a preliminary clinical diagnosis, observing relevant ethical and legal norms, by making a reasoned decision according to existing algorithms and standard schemes, in case of the need to expand the standard scheme, be able to substantiate personalized recommendations under the control of the head physician in the conditions of a medical institution.
10	Determine the necessary mode of work, rest and nutrition on the basis of the final clinical diagnosis, observing the relevant ethical and legal norms, by making a reasoned decision according to existing algorithms and standard schemes.
11	Determine the approach, plan and tactics of managing physiological pregnancy, physiological childbirth and the postpartum period by making a reasoned decision according to existing algorithms and standard schemes.
12	To assess the general condition of a newborn child by making a reasoned decision according to existing algorithms and standard schemes, observing the relevant ethical and legal norms.
13	Assess and monitor the child's development, provide recommendations on feeding and specifics of nutrition depending on age, organize preventive vaccinations according to the calendar.
14	Determine tactics and provide emergency medical care in emergency situations (according to list 3) in limited time in accordance with existing clinical protocols and treatment standards.
15	To organize the provision of medical aid and medical evacuation measures to the population and military personnel in emergency situations and hostilities, including in field conditions.
16	Form rational medical routes for patients; organize interaction with colleagues in their own and other institutions, organizations and institutions; to apply tools for the promotion of medical services in the market, based on the analysis of the needs of the population, in the conditions of the functioning of the health care institution, its division, in a competitive environment.
17	Perform medical manipulations (according to list 5) in the conditions of a medical institution, at home or at work based on a previous clinical diagnosis and/or indicators of the patient's condition by making a reasoned decision, observing the relevant ethical and legal norms.
18	To determine the state of functioning and limitations of a person's vital activities and the duration of incapacity for work with the preparation of relevant documents, in the conditions of a health care institution, based on data about the disease and its course, peculiarities of the person's

	professional activity, etc. Maintain medical documentation regarding the patient and the contingent of the population on the basis of regulatory documents.
19	Plan and implement a system of anti-epidemic and preventive measures regarding the occurrence and spread of diseases among the population.
20	Analyze the epidemiological situation and carry out measures for mass and individual, general and local prevention of infectious diseases.
21	Search for the necessary information in the professional literature and databases of other sources, analyze, evaluate and apply this information.
22	Apply modern digital technologies, specialized software, and statistical methods of data analysis to solve complex healthcare problems.
23	Assess the impact of the environment on human health in order to assess the morbidity of the population.
24	To organize the necessary level of individual safety (own and the persons he cares for) in case of typical dangerous situations in the individual field of activity.
25	It is clear and unambiguous to convey one's own knowledge, conclusions and arguments on health care problems and related issues to specialists and non-specialists.
26	Manage work processes in the field of health care, which are complex, unpredictable and require new strategic approaches, organize the work and professional development of personnel taking into account the acquired skills of effective teamwork, leadership positions, appropriate quality, accessibility and justice, ensuring the provision of integrated medical help
27	Communicate freely in the national and English languages, both orally and in writing to discuss professional activities, research and projects.
28	Make effective decisions on health care issues, assess the necessary resources, take into account social, economic and ethical consequences.
29	Plan, organize and carry out measures for the specific prevention of infectious diseases, including in accordance with the National calendar of preventive vaccinations, both mandatory and recommended. Manage vaccine residues, organize additional vaccination campaigns, including immunoprophylaxis measures.
8 – Resource support for program implementation	
Staff support	Compliance with license requirements: - provision of scientific-pedagogical (pedagogical) and/or scientific workers necessary for the implementation of educational components provided for in the educational-professional program; - the share of scientific-pedagogical (pedagogical) and/or scientific workers who have a scientific degree and/or academic title and work at the main place of work is at least 50 percent, of which at least 10% are people who have a

	scientific degree of Doctor of Sciences and /or academic title of professor; - the composition of scientific-pedagogical, pedagogical and scientific workers who have educational and/or professional qualifications corresponding to the educational program is at least three persons who have a scientific degree and/or an academic title and work in an educational institution at their main place of work; - each educational component of the educational program is provided by scientific and pedagogical (pedagogical) and/or scientific workers taking into account the appropriateness of their educational and/or professional qualifications; - scientific-pedagogical, pedagogic and scientific workers who ensure the educational process have at least four achievements in their professional activities over the last five years, defined in Clause 38 of the Licensing Terms.
Material and technical support	The educational process takes place in bright rooms equipped with the latest technologies, built according to European standards, equipped with video projectors and plasma TVs. Provision of multimedia equipment for simultaneous use in educational classrooms in at least 25% of classrooms. Provision of computer workstations, laboratories, specialized equipment, equipment necessary for the implementation of the educational and professional program "Medicine". The area of educational premises for the educational process is at least 2.4 square meters. meter per person, taking into account no more than three shifts of training. Availability of social and household infrastructure: library, including a reading room, food outlets, an assembly hall, a sports hall, a sports ground, a medical center; Provision of a dormitory for students of higher education who need it. The University has properly equipped specialized offices, in particular, created and staffed: Offices of anatomy, clinical anatomy and operative surgery; hygiene, social medicine and life safety with the basics of labor protection; histology, cytology and embryology; emergency and urgent medical care; medical biology and biological physics; microbiology, virology and immunology; basics of medical and pharmaceutical commodity science (a component of the educational pharmacy complex); pharmacology and clinical pharmacy; pharmaceutical and medical law; physical rehabilitation (as part of the sports hall); chemistry laboratories (analytical, physical colloidal, medical,

		biological); polyclinic reception study room; X-ray room (as part of the University Clinic); simulation training center.
Informational and educational and methodological support		Regulatory support is carried out by the Law of Ukraine "On Higher Education", higher education standards (state, branch and university), other normative acts of the Ministry of Education and Science of Ukraine and higher education institutions. Educational activity is carried out according to the curriculum and explanatory note to it. Each academic discipline of the curriculum is provided with a working program, a set of educational and methodological support. Practical training programs have been developed for practical training of students. Provision of students with educational materials for each educational discipline of the curriculum is 100%. Methodical materials are available for the final certification of higher education applicants. Information support is provided by textbooks (textbooks, study guides, etc.) and electronic resources. The presence of domestic and foreign professional periodicals of the corresponding or related profile in the library of the educational institution, including in electronic form, is at least 5 titles. Access to databases of periodical scientific publications in English of the relevant or related profile is provided. The presence of an official website of the educational institution, which contains basic information about its activities. The presence of a page on the official website of the educational institution in English, which contains basic information about activities, rules for the admission of foreigners and stateless persons, conditions of study and residence of foreigners and stateless persons, contact information.
9 – Academic mobility		
National mobility	credit	The opportunity for participants of the educational process to study, teach, do internships or conduct scientific activities in another institution of higher education (scientific institution) on the territory of Ukraine, to participate in various educational or educational and research programs.
International mobility	credit	The possibility of participants in the educational process to study, teach, do internships or conduct scientific activities in another institution of higher education outside of Ukraine; the possibility of re-enrollment of received credits on the basis of the European Credit Transfer System (ECTS), in particular by comparing the content of educational programs.

2. List of components of the educational and professional program and their logical sequence (according to the curriculum)

2.1. List of components of the educational and professional program

Code n\д	Components of the educational program (educational disciplines, practices)	Number loans ECTC	Final control form
1	2	3	4
GENERAL TRAINING CYCLE			
NOK 1	Foreign Language	6	PMK, Zalik
NOC 2	Ukrainian language (by professional direction)	3	Test
NOK 3	History of Ukraine and Ukrainian culture	3	Test
NOK 4	Philosophy	3	Test
NOK 5	Latin language and medical terminology	3	Test
NOK6	Medical biology	4	Exam
NOC 7	Medicinal chemistry	3.5	Exam
NOK 8	Medical and biological physics	3.5	Test
NOK 9	Biological and bioorganic chemistry	9	Assessment, Exam
NOK 10	Human anatomy	10	Assessment, Exam
NOC 11	Histology, cytology and embryology	10	Assessment, Exam
NOK 12	Physiology	10	Assessment, Exam
NOK 13	Microbiology, virology and immunology	7	Assessment, Exam
Just by cycle		75	
VOCATIONAL TRAINING CYCLE			
NOK 14	Pathomorphology	7	Assessment, Exam
NOK 15	Pathophysiology	7	Assessment, Exam

NOK 16	Pharmacology	6	Assessment, Exam
NOK 17	Bioethics and biosafety with the basics of labor protection in the industry	3.5	Test
NOK 18	Hygiene and ecology	6	Assessment, Exam
NOK 19	Propaedeutics of internal medicine	6	PMK, Zalik
NOK 20	Pediatric propaedeutics	4.5	Exam
NOK 21	General surgery	6	Exam
NOK 22	Radiology	3.5	Test
NOK 23	Internal medicine, including pulmonology, phthisiology, clinical immunology and allergology	8	Exam
NOK 24	Internal Medicine, including gastroenterology, endocrinology and occupational diseases	8	PMK, Zalik
NOK 25	Internal medicine, including cardiology, rheumatology and nephrology	10	Exam
NOK 26	Pediatrics, including neonatology	4.5	Exam
NOK 27	Pediatrics	7	PMK, Zalik
NOK 28	Pediatrics with children's infectious diseases	4	Exam
NOK 29	Surgery	5	PMK, Zalik
NOK 30	Surgery, including oncosurgery	7	PMK, Zalik
NOK 31	Surgery, including pediatric surgery	9	Exam
NOK 32	Obstetrics and gynecology	11	Exam
NOK 33	Social medicine, public health	7	Exam
NOK 34	Urology	3	Test
NOK 35	Otorhinolaryngology	3	Exam
NOK 36	Ophthalmology	3	Exam
NOC 37	Neurology	3	Exam
NOK 38	Psychiatry, narcology	3.5	Exam
NOK 39	Dermatology, venereology	3	Exam
NOK 40	Physical rehabilitation, sports medicine	3	Test

NOK 41	Infectious diseases	4.5	Exam
NOK 42	Oncology and radiation medicine	3	Test
NOK 43	Traumatology and orthopedics	3	Test
NOK 44	Anesthesiology and intensive care	3	Test
NOK 45	General practice (family medicine)	3	Test
NOK 46	Clinical anatomy and operative surgery	3	Exam
NOK 47	Training of reserve officers of the field of knowledge "Health care". Specialty "Medicine"	3	Test
NOK 48	Digital technologies in medicine	3	Test
That's all		175	
PRACTICAL TRAINING			
OK 48	Industrial practice: Patient care	4	Test
OK 49	Industrial practice: Nursing practice	3	Test
OK 50	Industrial medical practice	10	Test
That's all		17	
Together according to the normative part		267	
II. VARIABLE PART			
Elective academic disciplines			
VOK.01	Elective course 1	14	Test
VOK.02	Elective course 2	17.5	Test
VOK.03	Elective course 3	13	Test
VOK.04	Elective course 4	13	Test
VOK.05	Elective course 5	14	Test
VOK.06	Elective course 6	18.5	Test
"Together by selective part"		90 / credit (26)	
OK 51	Certification	3	
Together according to the curriculum		360	

The volume of the educational and professional program is 360 ECTS credits. The standard part of the program is 270 ECTS credits (75.0%). The volume of the sample part is 90 ECTS credits (25.0%).

The program has internal integrity and guarantees the avoidance of duplication of academic disciplines and their elements. There is an opportunity for students to choose elective disciplines to acquire additional competencies for the ability of graduates to work in health care institutions.

2.2. Structural and logical scheme of the educational and professional program

The structural and logical scheme of the educational and professional program is presented in Appendix 2. The list and names of the disciplines of the curriculum were developed taking into account the acquisition of integral, general and special competencies by higher education students.

The structure of the curriculum is subject-integrated and focused on observing the logical sequence of teaching the disciplines that make up the corresponding cycles of training: general, professional and practical training.

The educational and professional program "Medicine" is a systematic educational structure in which interdisciplinary connections are established both at the theoretical and practical levels. Each specific discipline has a theoretical basis and at the same time is oriented towards its mandatory practical application. All disciplines of the program are connected conceptually and methodologically, exist in a single system of holistic education, teaching students of the second (master's) level of higher education in the specialty 222 "Medicine".

3. Form of attestation of applicants of higher education

Form of attestation of a higher education applicant	Attestation is carried out in the form of a single state qualifying exam. In addition, for educational and scientific programs, certification includes public defense of qualification work.
Requirements to the only one state qualification exam	The unified state qualifying exam is conducted in accordance with the Procedure for conducting the unified state qualifying exam for master's degree holders in the field of knowledge "Health Care".

4. System of internal quality assurance of higher education

The system of ensuring the quality of educational activities and the quality of higher education by institutions of higher education (system of internal quality assurance) provides for the implementation of the following procedures and measures:

- 1) determination of the principles and procedures for ensuring the quality of higher education;
- 2) monitoring and periodic review of educational programs;
- 3) annual assessment of higher education applicants, scientific and pedagogical and pedagogical workers of the institution of higher education and regular publication of the results of such assessments on the official website of the university, on information stands and in any other way;
- 4) provision of advanced training of pedagogical, scientific and scientific-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 effective management of the educational process;
- 7) ensuring publicity of information about educational programs, degrees of higher education and qualifications;
- 8) ensuring compliance with academic integrity by university employees and students of higher education, including creating and ensuring the functioning of an effective system for preventing and detecting academic plagiarism;
- 9) other procedures and measures.

**Guarantor of the educational and professional program
doctor of medical sciences, head of the department
clinical disciplines and nursing**

I.V. Drozdova

List 1 (syndromes and symptoms)

1. amenorrhea
2. anemic syndrome
3. anuria and oliguria
4. arterial hypertension
5. arterial hypotension
6. chest pain
7. stomach ache
8. pain in the limbs and back
9. pain in the perineum
10. sore throat
11. vomiting
12. broncho-obstructive syndrome
13. bulbar syndrome
14. effusion in the pleural cavity
15. hallucinatory-paranoid syndrome
16. fever
17. hemorrhagic syndrome
18. exanthema, enanthema
19. hepatomegaly and hepatolienal syndrome
20. headache
21. dysuria
22. dysmenorrhea
23. dyspepsia
24. dysphagia
25. diarrhea
26. jaundice
27. dyspnea
28. asphyxia
29. constipation
30. dizziness,
31. cardiomegaly
32. cough
33. intestinal obstruction
34. hemoptysis
35. lymphadenopathy
36. meningeal syndrome
37. uterine bleeding
38. swelling syndrome
39. paresis, paralysis
40. polyuria
41. portal hypertension
42. speech impairment (aphasia)
43. heart rhythm and conduction disturbances
44. disorders of consciousness
45. itchy skin
46. urinary syndrome
47. dementia syndrome
48. dehydration syndrome
49. indigestion syndrome
50. stridor
51. joint syndrome
52. convulsions
53. emaciation
54. cyanosis
55. partial or complete loss of vision
56. partial or complete hearing loss
57. gastrointestinal bleeding

List 2 (diseases)

I) Diseases of the blood and hematopoietic organs, disorders involving the immune mechanism

1. anemia
2. hemolytic disease of newborns
3. hemophilia
4. leukemia
5. lymphomas
6. Congenital (Bruton's disease, Wiskott-Aldridge syndrome) and acquired immunodeficiency states
7. neonatal sepsis
8. surgical sepsis
9. idiopathic thrombocytopenic purpura
10. chronic radiation damage

II) Mental and behavioral disorders:

11. bipolar affective disorder
12. acute psychosis, including alcoholic delirium
13. epilepsy
14. neurotic disorders
15. personality disorders
16. schizophrenia

III) Diseases of the nervous system

17. intracranial injury
18. meningitis, encephalitis
19. migraine and other types of headache
20. perinatal encephalopathy
21. violation of the autonomic nervous system
22. violation of cerebral circulation
23. vertebrogenic diseases of the nervous system, neuropathy and polyneuropathy
24. multiple sclerosis
25. chronic occupational injuries (vibration disease, occupational dyskinesias)

Eye diseases

26. blepharitis

27. acute attack of glaucoma
28. conjunctivitis
29. foreign body of the eye
30. eye injuries
31. retinopathy

Diseases of the throat, ears, nose

32. laryngitis
33. to swell
34. peritonsillar abscess
35. sinusitis
36. tonsillitis

IV) Diseases of the cardiovascular system:

37. aortic aneurysms
38. atherosclerosis
39. varicose veins of the lower extremities
40. congenital heart defects
41. secondary arterial hypertension
42. acute occlusion of main and peripheral arteries;
43. endocarditis
44. essential and secondary arterial hypertension
45. coronary heart disease
46. carditis
47. cardiomyopathy
48. pulmonary heart
49. acquired heart defects
50. obliterating endarteritis
51. pericarditis
52. heart rhythm and conduction disturbances
53. heart failure
54. injuries of the heart and blood vessels
55. pulmonary embolism
56. phlebitis, thrombophlebitis

V) Diseases of respiratory organs and mediastinum:

57. asphyxia

- 58.bronchial asthma
- 59.bronchitis
- 60.bronchiectasis disease
- 61.bronchopulmonary dysplasia
- 62.congenital malformations of respiratory organs
- 63.respiratory failure
- 64.infectious and destructive lung diseases
- 65.pulmonary insufficiency
- 66.mediastinitis
- 67.cystic fibrosis
- 68.lung and mediastinal neoplasms
- 69.pleurisy
- 70.pneumoconiosis
- 71.pneumonia
- 72.pneumothorax
- 73.respiratory distress syndrome and pneumonia of newborns
- 74.foreign body in the respiratory tract
- 75.chest injuries (superficial, open)
- 76.chronic obstructive pulmonary disease

VI) Diseases of digestive organs:

- 77.rectal prolapse
- 78.ulcer disease
- 79.congenital malformations of digestive organs
- 80.gastroesophageal reflux disease, esophagitis
- 81.gastritis, duodenitis
- 82.acute and chronic hepatitis
- 83.acute intestinal obstruction
- 84.acute and chronic appendicitis
- 85.acute and chronic pancreatitis
- 86.benign diseases of the esophagus
- 87.enteritis, colitis
- 88.inflammatory diseases of the rectum and perianal region
- 89.pinchd and unpinchd abdominal hernias
- 90.neoplasms of the esophagus, stomach, colon, liver and pancreas
- 91.peptic ulcers of the stomach and duodenum
- 92.peritonitis

- 93.perforation of a hollow organ
- 94.liver failure
- 95.malabsorption syndrome
- 96.stenosis of the pylorus of the stomach
- 97.abdominal injuries (superficial, open)
- 98.functional gastrointestinal disorders
- 99.diseases of the operated stomach
- 100.cholecystitis, cholangitis, gallstone disease, choledocholithiasis
- 101.cirrhosis of the liver
- 102.gastrointestinal bleeding

VII) Diseases of the genitourinary system:

- 103.amyloidosis of the kidneys
- 104.balanitis, balanoposthitis
- 105.congenital malformations of the urinary system
- 106.glomerulonephritis
- 107.dysmetabolic nephropathy
- 108.nephrotic syndrome
- 109.neoplasms of the kidney, urinary tract and prostate gland
- 110.pyelonephritis
- 111.prostatitis
- 112.urolithiasis
- 113.tubulointerstitial nephritis
- 114.urethritis
- 115.chronic kidney disease
- 116.cystitis

VIII) Diseases of the skin and subcutaneous tissue:

- 117.allergic dermatoses (dermatitis, toxidermia, eczema)
- 118.bacterial diseases of the skin and subcutaneous tissue, pyoderma
- 119.purulent-inflammatory diseases of fingers and hands
- 120.purulent-inflammatory diseases in children and newborns
- 121.mycoses
- 122.burns and frostbite
- 123.parasitic skin diseases (scabies, lice)
- 124.psoriasis

- 125.bullous dermatoses
- 126.specific surgical infection (anaerobic clostridial and non-clostridial)

IX) Diseases of the musculoskeletal system and connective tissue:

- 127.ankylosing spondylitis
- 128.congenital and acquired malformations of the musculoskeletal system
- 129.acute rheumatic fever
- 130.dermatomyositis and polymyositis
- 131.neoplasm of the musculoskeletal system
- 132.osteoarthritis
- 133.osteomyelitis
- 134.gout
- 135.polytrauma
- 136.reactive arthritis
- 137.rheumatoid arthritis
- 138.systemic scleroderma
- 139.systemic lupus erythematosus
- 140.systemic vasculitis (polyarteritis nodosa, hemorrhagic vasculitis, hypersensitivity vasculitis)
- 141.typical fractures of the bones of the shoulder, forearm, hand, hip, leg, foot
- 142.pelvic injury
- 143.spinal cord injury
- 144.damage to large joints (hip, knee, ankle-foot, elbow)
- 145.chronic rheumatic disease
- 146.juvenile rheumatoid arthritis

X) Diseases of the endocrine system, nutritional disorders and metabolic disorders:

- 147.acromegaly
- 148.hyperplasia of the thymus
- 149.hypothyroidism
- 150.hypotrophy, protein-energy deficiency
- 151.pituitary dwarfism
- 152.diffuse toxic goiter
- 153.iodine deficiency diseases of the thyroid gland
- 154.diabetes insipidus

- 155.neoplasm of the thyroid gland
- 156.adiposity
- 157.congenital dysfunction of the adrenal cortex
- 158.rickets, spasmophilia,
- 159.hereditary metabolic diseases (phenylketonuria)
- 160.hereditary chromosomal disorders (Down's disease, Shereshevsky-Turner syndrome)
- 161.thyroiditis
- 162.thyrotoxicosis
- 163.Itsenko-Cushing's disease and syndrome
- 164.chronic adrenal insufficiency
- 165.diabetes

XI) Infectious and parasitic diseases:

- 166.bacterial food poisoning
- 167.erysipelas
- 168.botulism
- 169.viral hepatitis
- 170.varicella
- 171.congenital infections of the newborn
- 172.helminth infections
- 173.herpessvirus diseases
- 174.influenza and other acute respiratory viral infections
- 175.diphtheria
- 176.infectious mononucleosis
- 177.candidiasis
- 178.whooping cough
- 179.intestinal bacterial infections
- 180.intestinal viral infections
- 181.measles
- 182.tick-borne viral encephalitis
- 183.rubella
- 184.leptospirosis
- 185.malaria
- 186.meningococcal infection
- 187.especially dangerous viral infections
- 188.mumps infection
- 189.poliomyelitis
- 190.tetanus
- 191.protozoan infections

- 192.rickettsiosis
- 193.anthrax
- 194.rabies
- 195.scarlet fever
- 196.tuberculosis of various localization
- 197.Lyme disease
- 198.disease caused by the human immunodeficiency virus (HIV)
- 199.chlamydial infections
- 200.cholera
- 201.plague

- **infectious diseases transmitted mainly sexually:**

- 202.gonococcal infection
- 203.syphilis

XII) Diseases of the reproductive system

pathologies of pregnancy:

- 204.multiple pregnancy
- 205.vomiting (vomiting) of pregnant women
- 206.pregnancy with extragenital pathology
- 207.fetal distress during pregnancy
 - 208. fetal growth retardation
 - 209. immune conflict during pregnancy
 - 210. cystic drift
 - 211. placenta previa
 - 212. premature detachment of the placenta
 - 213. premature birth and delayed pregnancy
 - 214. ectopic pregnancy
 - 215. preeclampsia and eclampsia

216. self-inflicted abortion
pathology of childbirth and the postpartum period:

- 217. anomalies of labor activity
- 218. abnormalities of the pelvis, including clinically narrow pelvis
- 219. fetal distress during childbirth
- 220. childbirth and postpartum bleeding
- 221. incorrect positions and presentation of the fetus
- 222. postpartum septic diseases
- 223. injuries of the uterus and birth canal

gynecological diseases:

- 224. abnormal uterine bleeding
- 225. ovarian apoplexy
- 226. sterility
- 227. congenital malformations of the female genital organs
- 228. benign dysplasia of the mammary glands
- 229. benign and precancerous neoplasms of the female genital organs
- 230. endometriosis
- 231. inflammatory diseases of the female genital organs
- 232. malignant neoplasms of the female genital organs
- 233. mastitis
- 234. neuroendocrine syndromes
- 235. neoplasm of the mammary gland

List 3 (emergency conditions):

1. asphyxia (including neonatal)
2. hypertensive crisis
3. acute respiratory failure
4. acute urinary retention
5. acute adrenal insufficiency
6. acute kidney injury
7. acute liver failure
8. acute heart failure
9. acute poisoning, incl. combat poisonous substances
10. acute psychosis
11. acute coronary syndrome
12. acute radiation and chemical damage, including in field conditions and emergency situations
13. acute cerebral insufficiency
14. electric shock
15. status epilepticus
16. acute bleeding
17. syndrome of acute blood loss, including in field conditions and emergency situations
18. cardiac arrest
19. collapse
20. impaired consciousness and comatose states
21. renal colic
22. biliary colic
23. acute anaphylactic reactions
24. acute heart rhythm disturbances,
25. cold injury, incl. in field conditions
26. heat injury, incl. in field conditions
27. convulsive syndrome
28. drowning
29. strangulation asphyxia
30. normal birth
31. shocks
32. bites of snakes, insects, animals
33. penetrating wounds, including during hostilities
34. care, including in field conditions
35. foreign bodies of the respiratory tract, gastrointestinal tract, ENT organs and the eye

List 4 (laboratory and instrumental studies)

1. pleural fluid analysis
2. analysis of ascitic fluid
3. synovial fluid analysis
4. urine analysis according to Zimnitsky
5. urinalysis according to Nechiporenko
6. activity of alpha-amylase in blood and urine, fecal elastase 1
7. blood proteins and their fractions, C-reactive protein
8. blood glucose, glycosylated hemoglobin,
9. oral glucose tolerance test
10. blood lipids and lipoproteins and their fractions
11. blood hormones
12. serum ferritin, iron and copper
13. creatinine, urea in blood and urine, rate of eye filtration club
14. blood electrolytes
15. blood aminotransferases
16. total blood bilirubin and its fractions
17. coagulogram
18. blood uric acid
19. blood alkaline phosphatase
20. histomorphological study of lymph node biopsy
21. histomorphological study of a biopsy of parenchymal organs
22. histomorphological study of biopsy of mucous membranes
23. histomorphological study of muscle and skin biopsy
24. study of the indoor environment (indicators of microclimate, natural and artificial lighting, bacteriological and chemical air pollution).
25. study of the function of external respiration
26. standard ECG (in 12 leads)
27. endoscopic examination of the bronchi
28. endoscopic examination of the digestive tract
29. echocardiography and dopplerography
30. general analysis of feces
31. general blood test
32. general analysis of urine
33. general analysis of cerebrospinal fluid
34. general analysis of sputum
35. general analysis of sputum
36. general immunological blood profile
37. serological reactions in infectious diseases
38. express tests for viral diseases
39. amplification methods for infectious diseases (PCR, LLR)
40. serological reactions in autoimmune diseases
41. chemical and bacteriological studies of the human environment (atmospheric air, water bodies, soil).
42. microbiological research of biological fluids and secretions
43. measurement of radiation (sound, vibration, ionizing), individual radiometry.
44. methods of instrumental visualization of the thyroid gland
45. X-ray contrast angiography
46. methods of instrumental visualization of organs of the abdominal cavity
47. methods of instrumental visualization of chest cavity organs
48. methods of instrumental visualization of the genitourinary system
49. methods of instrumental visualization of the skull, spine, spinal cord, bones and joints
50. methods of instrumental imaging of the breast
51. tuberculin diagnosis

- 52. multi-moment fractional study of bile and pH-metry of the stomach and esophagus
- 53. chemical, organoleptic, bacteriological research of food products and drinking water
- 54. cytological examination of the cervix
- 55. measurement of ergonomic indicators of difficulty and intensity of work.

List 5 (medical manipulations):

1. perform indirect heart massage
2. perform artificial respiration
3. perform defibrillation using a manual automatic cardioverter defibrillator
4. register a standard 12-lead ECG
5. to temporarily stop external bleeding
6. carry out primary surgical treatment of the wound, dressing, removal of skin sutures, including in field conditions
7. apply bandages, including in field conditions
8. install a nasogastric and orogastric probe
9. carry out transport immobilization
10. carry out administration of medicinal substances (intravenous jet and drip, intraosseous), including in field conditions
11. provide peripheral venous access
12. measure blood pressure
13. restore airway patency
14. perform bladder catheterization with a soft probe
15. perform nasal tamponade
16. perform the technique of "skin-to-skin" contact of the newborn and early attachment to the breast
17. perform a digital examination of the rectum and with the help of a rectal mirror
18. perform a digital examination of the prostate
19. carry out a clinical examination of the mammary glands
20. perform a pleural puncture
21. determine blood groups, Rhesus affiliation
22. transfuse blood components and blood substitutes
23. carry out bimanual examination and examination of a woman in mirrors
24. perform pelviometry;
25. carry out external (Leopold techniques) and internal obstetric research;
26. perform auscultation of the fetus
27. taking smears for bacterioscopic, bacteriological and cytological studies.