

MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE

V.N. KARAZIN KHARKIV NATIONAL UNIVERSITY

"APROVED"



**EDUCATIONAL PROFESSIONAL PROGRAM OF
HIGHER EDUCATION**

FOR SPECIALISTS TRAINING AT V.N. KARAZIN KHARKIV NATIONAL UNIVERSITY

FIELD OF KNOWLEDGE	22 Healthcare
SPECIALTY	222 Medicine
LEVEL OF HIGHER EDUCATION	Second (Master's) level
DEGREE	Master
PROFESSIONAL QUALIFICATION	Doctor

Approved by the Academic Council of Kharkiv National University,

Protocol № 13 of 31 October 2016.

PREAMBLE

INTRODUCED by the Educational and Methodical Center of V.N. Karazin Kharkiv National University.

APPROVED by the Academic Council of V.N. Karazin Kharkiv National University, protocol № 13 of October 31, 2016.

INTRODUCED for the first time.

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1. Introduction

1.1. General information

According to the Order of the Ministry of Education and Science of Ukraine, dated 06.11.2015, № 1151 "On introduction features of the list of fields of knowledge and specialties in which higher education students are trained ", higher educational establishments are proposed to develop and implement educational programs and curricula according to the Law of Ukraine "On Higher Education" from September. 1, 2016.

The following provisions of the Law of Ukraine “**On Higher Education**” were used to create a temporary educational program in the absence of methodology and methodological recommendations:

1) **Art. 1, item 1. 17** - the educational program (educational-professional, educational-scientific) is a system of educational components at the corresponding level of higher education within a specialty defining:

- requirements for the level of education of persons who can start training under this program;
- a list of subjects and the logical sequence of their study;
- the number of ECTS credits required to implement this program;
- expected learning outcomes to be mastered by the applicant for the relevant degree of higher education;

2) **Art. 10, item 3** - the standard of higher education defines the following requirements to the educational program:

- the number of ECTS credits required to obtain an appropriate higher education degree;
- list of competencies of the graduate;
- normative content of higher education training, formulated in terms of learning outcomes (set of knowledge, skills, abilities and other competencies);
- forms of applicants’ certification for higher education;
- requirements for the available system of internal quality assurance for higher education;

3) **Art. 5, item 1** - the second (master's) level should provide for the acquisition of in-depth theoretical and / or practical knowledge, skills, abilities in the chosen specialty (or specialization), general principles of methodology of scientific and / or professional activities, other competencies sufficient for effective performance of tasks of innovative character at the corresponding level of professional activity;

4) **Art. 1 item 1.13** – a competence determines the ability of a person to successfully carry out professional and further educational activities and is the result of training at a certain level of higher education;

5) **Art. 1 item 1.19** - learning outcomes - a set of knowledge, skills, abilities, other competencies acquired by a person in the process of learning a certain educational, professional, educational and scientific program, which can be identified, quantified and measured.

Based on these provisions, the following **structure of the educational program** was adopted (in the terminology of the Law of Ukraine "On Higher Education"):

- identification of types, content and a system of relevant tasks of innovative activity of the master (content of higher education), taking into account the requirements of professional standards or equivalent regulatory framework;

- regulation of the master's competency system as the ability to effectively perform tasks of an innovative nature at the appropriate level of professional activity, taking into account requirements of professional standards or equivalent regulatory framework and the requirements of the National Qualifications Framework;

- determination of the program learning outcomes and their degree of complexity by decomposition of competencies;

- nomenclature substantiation of educational activities types due to the adequate distribution of program learning outcomes by academic subjects, practices, individual tasks;

- determination of credits for mastering all types of educational activities.

Implementation of a competency-based approach to higher education design by creating a clear link between external goals of higher education and disciplines, practices and individual tasks is a decisive factor in the quality of higher education at V.N. Karazin Kharkiv National University, as well as a real system of internal support.

Transparent and clear structure and content of the educational program are relevant for entrants, applicants, teachers, employers.

The educational program is used during:

- accreditation of the educational program, inspection of educational activity by specialty and specialization;

- development of curricula, programs of academic subjects and practices;

- development of tools for diagnosing the quality of higher education;

- determining the content of training in the system of retraining and advanced training;

- professional orientation of applicants for the specialty.

The educational and professional program takes into account the requirements of the Law of Ukraine "On Higher Education", the National Qualifications Framework and establishes:

- scope and term of master's studies;
- general competencies;
- special (professional) competencies;
- list and scope of academic subjects for mastering the competencies of the educational program;
- requirements for the structure of academic disciplines.

Educational and professional program is used for:

- drawing up curricula and working curricula;
- formation of individual plans of students;
- formation of programs of academic subjects, practices, content of individual tasks;
- determination of the information base for the formation of diagnostic tools;
- accreditation of the educational program;
- external quality control of training;
- certification of masters, majoring in 222 Medicine.

Users of the educational and professional program:

- applicants for higher education studying at V.N. Karazin Kharkiv National University;
- research and teaching staff of V.N. Karazin Kharkiv National University, training masters in specialty 222 Medicine;
- examination commissions in specialty 222 Medicine;
- Admissions Committee of V.N Karazin Kharkiv National University.

The educational and professional program applies to the departments of medicine and other faculties of V.N. Karazin Kharkiv National University, which train specialists on a master's degree in 222 Medicine.

1.2. Regulatory references

The educational and professional program is developed on the basis of the following normative documents:

1. Law of Ukraine "On Higher Education" of 01.07.2014 // Bulletin of the Verkhovna Rada. - 2014. - № 37, 38.
2. National qualifications framework. Supplement to the Resolution of the Cabinet of Ministers of Ukraine of November 23, 2011 № 1341.
3. Resolution of the Cabinet of Ministers of Ukraine dated 29.04.2015 № 266 "On approval of the list of fields of knowledge and specialties for which higher education students are trained."
4. Order of the Ministry of Education and Science of Ukraine dated 06.11.2015 № 1151 "On the peculiarities of the introduction of the list of fields of knowledge and specialties for which higher education is carried out", approved by the Cabinet of Ministers of Ukraine dated April 29, 2015 № 266.
5. Order of the Ministry of Education and Science of Ukraine of October 15, 2015 №1085 On the Conditions of Admission to Higher Educational Institutions of Ukraine in 2016.
6. Methodical recommendations for the development of standards of higher education: a project [Electronic resource] / Ministry of Education and Science of Ukraine. - K. - Access mode: (<http://mon.gov.ua/citizens/zv'yazki-z-gromadskisty/gromadske-obgovorennya-2016.html>).
7. Resolution of the Cabinet of Ministers of Ukraine of December 30, 2015 № 1187 Licensing conditions for educational activities of educational institutions (Resolution of the Cabinet of Ministers of Ukraine of December 30, 2015 № 1187 "Licensing conditions for educational activities of educational institutions").

1.3. Terms and their definition

In the program, the terms are used in the following meaning:

- 1) *autonomy and responsibility* - the ability to independently perform tasks, solve problems and be responsible for the results of your activities;
- 2) *accreditation of an educational program* - evaluation of an educational program and / or educational activity of a higher educational institution under this program for compliance with the standard of higher education; ability to meet the requirements of the standard and achieve the learning outcomes stated in the program; achievement of the learning outcomes announced in the program;
- 3) *certification* is the establishment of compliance of the level and volume of knowledge, skills, and other competencies acquired by higher education applicants with the requirements of higher education standards;

- 4) *types of educational activities of the applicant* - academic subjects, practices, individual tasks;
- 5) *higher education* is a set of systematized knowledge, competencies and practical skills, ways of thinking, professional, ideological and civic qualities, moral and ethical values, other competencies, acquired at a higher educational establishment in the relevant field of knowledge at a certain qualification at the level of higher education which complexity is higher than the level of complete general secondary education;
- 6) *higher educational establishment* is a separate type of institution, which is a legal entity of private or public law, operates in accordance with the issued license to conduct educational activities at certain levels of higher education; conducts scientific, scientific - technical, innovative and / or methodological activities, provides the organization of the educational process and obtaining by persons of higher education, postgraduate education, taking into account their vocations, interests and abilities;
- 7) *field of knowledge* is the main subject area of education and science, which includes a group of related specialties for which training is carried out;
- 8) *disciplinary competencies* - detailed competencies of the educational program as a result of a specialist's competencies decomposition of a specialty (specialization) at a certain level of higher education;
- 9) *European Credit Transfer and Accumulation System (ECTS)* - a credit transfer and accumulation system used in the European Higher Education Area to provide, recognize, validate qualifications and educational components and promote the academic mobility of higher education applicants. The system is based on determining the study load of the higher education student, necessary to achieve certain learning outcomes, and is accounted for in ECTS credits;
- 10) *diagnostic tools* - documents approved in the prescribed manner and intended to establish the achievement of the planned level in the formation of student competencies in control measures;
- 11) *applicants for higher education* - persons who study at a higher educational institution at a certain level of higher education in order to obtain the appropriate degree and qualification;
- 12) *content module* - a set of skills, knowledge, values that ensure the implementation of certain competencies;
- 13) *knowledge* - meaningful scientific information learnt by the subject, which is the basis of his conscious, purposeful activities. Knowledge is divided into empirical (factual) and theoretical (conceptual, methodological);
- 14) *integral competence* - a generalized description of the qualification level, which expresses the main competence characteristics of the level in relation to education and / or professional activity;
- 15) *integrated assessment* - the assessment result of specific tasks at different levels, taking into account the priority coefficient (a planned level of competences);

16) *information support of the subject* - teaching aids, which systematically set out the basics of knowledge in a particular discipline at the level of modern science and culture, support for self-education and self-study (textbooks; manuals, teaching aids, dictionaries, encyclopedias, reference books, etc.);

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

18) *qualification* - the official result of assessment and recognition, obtained when the authorized competent body has established that the person has achieved competencies (learning outcomes) according to specified standards;

19) *competence / competencies* (according to the NQF) - the ability of a person to perform a certain type of activity, expressed through knowledge, understanding, skills, values, other personal qualities;

20) *communication* - relationship of entities in order to transfer information, coordinate actions, joint activities;

21) *credit of the European Credit Transfer and Accumulation System* (hereinafter - ECTS credit) - a measurement unit of study load volume of the applicant in higher education, necessary to achieve certain (expected) learning outcomes. The volume of one ECTS credit is 30 hours. The workload of one full-time academic year is usually 60 ECTS credits;

22) *master's degree* is an educational degree obtained at the second level of higher education and awarded by a higher educational institution as a result of successful completion of the relevant educational program by the applicant for higher education. The master's degree is obtained by the educational-professional or by educational-scientific program. The master's degree in medicine, pharmacy or veterinary studies is obtained on the basis of complete general secondary education and is awarded by a higher education institution (scientific institution) as a result of successful completion of the relevant educational program, which amounts to 300-360 ECTS credits.

23) *methodological support of the subject* - recommendations for accompanying the student's educational activities in all types of classes, including information on the means and procedures of control measures, their form and content, methods of solving exercises, sources of information;

24) *modular control* - assessment of the achievement degree by the student at the planned level of competencies' formation by types of educational classes;

25) *academic discipline* - a set of modules subject to final control;

26) *educational element* - the minimum educational information of independent semantic value (concepts, phenomena, relations, algorithms);

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

28) *educational process* is an intellectual, creative activity in the field of higher education and science, carried out in a higher educational establishment (scientific

institution) through a system of scientific and methodological and pedagogical activities, aimed at transferring, mastering, multiplying and using knowledge, skills and other competencies of students, as well as the formation of a harmoniously developed personality.

29) *educational (educational-professional or educational-scientific) program* is 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, a list of subjects and logical sequence of their study, the number of ECTS credits, required to complete this program, as well as the expected learning outcomes (competences) to be mastered by the applicant for the relevant higher education degree;

30) *educational activity* - the activity of higher educational establishments, carried out in order to ensure the acquisition of higher, postgraduate education and meet other educational needs of applicants for higher education and other persons;

31) *final control* - a comprehensive assessment of the planned level of disciplinary competencies' formation;

32) *current control* - assessment of the student's mastery of educational material during the classroom training session (interviewing students on lectures, checking and receiving reports on the performance of laboratory work, testing, etc.);

33) *course program* - a normative document that determines the content of the course in accordance with the educational program, developed by the department, fixed by the order of the rector for teaching the subject;

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

35) *learning outcomes* (NQF) - competencies (knowledge, understanding, skills, values, other personal qualities) that a person acquires and / or is able to demonstrate after graduation;

36) *a level of the subject competence formation* - the share of correct answers or significant operations performed from the total number of questions or significant operations of the standard decisions;

37) *a working program of the discipline* - a normative document developed on the basis of the program of the course in accordance with the annual curriculum (contains distribution of total time for mastering individual learning elements and modules by types of classes and forms of study);

38) *independent work* – student's activity on studying educational elements and semantic modules, mastering of the planned competences, performance of individual tasks, preparation for control actions;

39) *specialty* - a component of the field of knowledge in which training is carried out;

40) *standard of higher education* is a set of requirements to the content and results of educational activity of higher educational establishments and scientific institutions at each level of higher education within each specialty;

41) *standard of educational activity* is a set of minimum requirements to personnel, educational-methodical, material-technical and informational support of the educational process of a higher educational establishments and a scientific institution;

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

43) *quality of higher education* - the level of knowledge, skills, abilities and other competencies acquired by a person, which reflects his / her competence in accordance with the standards of higher education.

1.4. Abbreviations

The following abbreviations and their meanings are accepted in the current document:

ECTS - European Credit Transfer and Accumulation System;

NQF - National Qualifications Framework;

GC - general competencies;

SC - special (professional, subject) competencies;

GO - general learning outcomes;

SO - special (professional, subject) learning outcomes.

2. COMPETENCES OF THE MASTER

Integral competence is the ability to solve typical and complex specialized and practical problems in a professional activity in the field of health care, or in the learning process, which involves research and / or innovation and is characterized by complexity and uncertainty of conditions and requirements.

2.1. General competencies according to the requirements of the NRC

GC ₁	Ability to abstract thinking, analysis and synthesis, the ability to learn and be modernly educated GC 10 The desire to preserve the environ Здатність до абстрактного мислення, аналізу та синтезу, здатність вчитися і бути сучасно навченим
GC ₂	Ability to apply knowledge in practical situations

GC 3	Knowledge and understanding of the subject area and professional activity
GC 4	Ability to adapt and act in a new situation
GC 5	Ability to make an informed decision; work in a team; interpersonal skills
GC 6	Ability to communicate in the state language both orally and in writing; ability to communicate in a foreign language
GC 7	Information and communication technology skills
GC 8	Definiteness and perseverance in terms of tasks and responsibilities
GC 9	Ability to act socially responsibly and consciously
GC 10	Aspiration to preserve the environment

2.2. Special (professional, subject) competencies

A generalized object of professional activity is public health, in particular health maintenance; understanding, prophylaxis, diagnosis and treatment of human diseases, as well as the impact of health problems on patients, their families and population.

SC ₁	Skills of interviewing and clinical examination of the patient
SC ₂	Ability to determine the required list of laboratory and instrumental studies and evaluate their results
SC ₃	Ability to establish a preliminary and clinical diagnosis of the disease
SC ₄	Ability to determine the required regime of work and rest in the treatment of diseases
SC ₅	Ability to determine the nature of nutrition in the treatment of diseases
SC ₆	Ability to determine the principles and nature of disease treatment
SC ₇	Ability to diagnose emergencies
SC ₈	Ability to determine the tactics of emergency medical care
SC ₉	Emergency care skills
SC ₁₀	Ability to carry out medical and evacuation measures
SC ₁₁	Skills to perform medical manipulations
SC ₁₂	Ability to determine the tactics of physiological pregnancy, physiological childbirth and the postpartum period. Family planning and contraceptive counseling skills
SC ₁₃	Ability to carry out sanitary - hygienic and preventive measures

SC ₁₄	Ability to plan and carry out preventive and anti-epidemic measures against infectious diseases
SC ₁₅	Ability to determine management tactics of persons subject to dispensary supervision
SC ₁₆	Ability to conduct examination of working capacity
SC ₁₇	Ability to keep medical records
SC ₁₈	Ability to conduct epidemiological and medical-statistical studies of public health; processing of state, social, economic and medical information
SC ₁₉	Ability to assess the impact of the environment, socio-economic and biological determinants on the health of the individual, family, population
SC ₂₀	Ability to analyze the activities of a doctor, department, health care institution, take measures to ensure the quality of medical care and improve the efficiency of medical resources
SC ₂₁	Ability to conduct activities for the organization and integration of medical care and marketing of medical services

3. NORMATIVE CONTENT OF EDUCATION, FORMULATED IN TERMS OF LEARNING RESULTS

Competence	Learning outcome	General learning outcomes according to the requirements of the NRC
GC ₁	GO ₁	To know methods of analysis, synthesis and further modern learning. To be able to analyze information, make informed decisions, be able to acquire modern knowledge. To establish appropriate connections to achieve goals. Be responsible for the timely acquisition of modern knowledge.
GC ₂	GO ₂	To have specialized conceptual knowledge acquired in the learning process. Be able to solve complex problems and problems that arise in professional activities. Clear and unambiguous communication of own conclusions, knowledge and explanations that substantiate them to specialists and non-specialists. Responsible for making decisions in difficult conditions
GC ₃	GO ₃	To have deep knowledge of the structure of professional activity. Be able to carry out professional activities that require updating and integration of knowledge. Ability to effectively form a communication strategy in professional activities. To be responsible for professional development, ability to further professional training with a high level of autonomy.

GC 4	GO 4	To know the types and methods of adaptation, principles of action in a new situation. To be able to apply means of self-regulation, to be able to adapt to new situations (circumstances) of life and activity. Establish appropriate connections to achieve results. Be responsible for the timely use of self-regulatory methods.
GC 5	GOP ₅	To know the tactics and strategies of communication, laws and ways of communicative behavior. Be able to make informed decisions, choose ways and strategies to communicate to ensure effective teamwork. Be able to make informed decisions, choose ways and strategies to communicate to ensure effective teamwork. Be responsible for the choice and tactics of communication.
GC 6	GO 6	To have perfect knowledge of the state language and basic knowledge of a foreign language. Be able to apply knowledge of the state language, both orally and in writing, be able to communicate in a foreign language. Use the state language in professional and business communication and in the preparation of documents. Use a foreign language in professional activities. To be responsible for fluency in the state language, for the development of professional knowledge.
GC 7	GO 7	To have deep knowledge in the field of information and communication technologies used in professional activities. Be able to use information and communication technologies in a professional field that requires updating and integration of knowledge. Use information and communication technologies in professional activities. Be responsible for the development of professional knowledge and skills
GC 8	GO 8	To know the responsibilities and ways to accomplish the tasks. Be able to set goals and objectives to be persistent and conscientious in the performance of duties. Establish interpersonal relationships to effectively perform tasks and responsibilities. Responsible for the quality of the tasks.
GC 9	GO 9	To know your social and community rights and responsibilities. To form one's civic consciousness, to be able to act in accordance with it. Ability to convey one's public and social position. Be responsible for your civic position and activities.
GC 10	GO 10	To know the problems of environmental protection and ways to preserve it. Be able to form requirements for themselves and others to preserve the environment. Make proposals to the relevant authorities and institutions on measures to preserve and protect the environment. Be responsible for the implementation of environmental protection measures within its competence.

Competence	Learning outcome	Special (professional, subject) learning outcomes
SC ₁	SO ₁	To collect data on patient's complaints, medical history, life history (including professional history), in a health care facility, its unit or at the patient's home, using the results of the interview with the patient, according to the standard scheme of the patient's survey.

		<p>Under any circumstances (in the health care facility, its unit, at the patient's home, etc.), using knowledge about the person, his organs and systems, according to certain algorithms:</p> <ul style="list-style-type: none"> • collect information about the general condition of the patient (consciousness, constitution) and appearance (examination of the skin, subcutaneous fat layer, palpation of lymph nodes, thyroid and mammary glands); • assess the psychomotor and physical development of the child; • examine the condition of the cardiovascular system (examination and palpation of the heart and superficial vessels, determination of percussion boundaries of the heart and blood vessels, auscultation of the heart and blood vessels); • examine the condition of the respiratory organs (examination of the chest and upper respiratory tract, palpation of the chest, percussion and auscultation of the lungs); • examine the condition of the abdominal organs (examination of the abdomen, palpation and percussion of the intestines, stomach, liver, spleen, palpation of the pancreas, kidneys, pelvic organs, finger examination of the rectum); • examine the condition of the musculoskeletal system (examination and palpation); • examine the state of the nervous system; • examine the condition of the genitourinary system; • assess the state of fetal development according to the calculation of fetal weight and auscultation of its heartbeat. •
SC ₂	SO ₂	To assess information about the diagnosis in the health care facility, its unit, using a standard procedure, using knowledge about the person, his organs and systems, based on the results of laboratory and instrumental studies (list 4).
SC ₃	SO _{3.1}	<p>In the conditions of the health care institution, its subdivision and among the attached population:</p> <ul style="list-style-type: none"> • Be able to identify and record the leading clinical symptom or syndrome (according to list 1) by making an informed decision, using previous patient history, physical examination of the patient, knowledge of the person, his organs and systems, adhering to relevant ethical and legal norms. • Be able to establish the most probable or syndromic diagnosis of the disease (according to list 2) by making an informed decision, by comparing with standards, using previous patient history and examination of the patient, based on the leading clinical symptom or syndrome, using knowledge about the person, his organs and systems, adhering to the relevant ethical and legal norms. •
	SO _{3.2}	<p>In the conditions of a health care institution, its subdivision:</p> <ul style="list-style-type: none"> • Assign a laboratory and / or instrumental examination of the patient (according to list 4) by making an informed decision, based on the

SC ₃		<p>most probable or syndromic diagnosis, according to standard schemes, using knowledge about the person, his organs and systems, adhering to relevant ethical and legal norms.</p> <ul style="list-style-type: none"> • Carry out differential diagnosis of diseases (according to list 2) by making an informed decision, according to a certain algorithm, using the most probable or syndromic diagnosis, laboratory and instrumental examination of the patient, knowledge of the person, his organs and systems, adhering to ethical and legal norms. • Establish a preliminary clinical diagnosis (according to list 2) by making an informed decision and logical analysis, using the most probable or syndromic diagnosis, laboratory and instrumental examination data, conclusions of differential diagnosis, knowledge of the person, his organs and systems, adhering to relevant ethical and legal norms. •
SC ₄	SO ₄	<p>Determine the necessary regime of work and rest in the treatment of the disease (according to list 2), in a health care facility, at home and at the stages of medical evacuation, including in the field, based on a preliminary clinical diagnosis, using knowledge of man, his organs and systems, adhering to the relevant ethical and legal norms, by making an informed decision according to existing algorithms and standard schemes.</p>
SC ₅	SO ₅	<p>Determine the necessary medical nutrition in the treatment of the disease (according to list 2), in a health care facility, at the patient's home and at the stages of medical evacuation, including in the field on the basis of a preliminary clinical diagnosis, using knowledge about the person, his bodies and systems, adhering to the relevant ethical and legal norms, by making an informed decision according to existing algorithms and standard schemes.</p>
SC ₆	SO ₆	<p>Determine the nature of treatment (conservative, operative) of the disease (according to list 2), in a health care facility, at home of the patient and at the stages of medical evacuation, including in the field on the basis of previous clinical diagnosis, using knowledge about the person, its bodies and systems, adhering to the relevant ethical and legal norms, by making an informed decision according to existing algorithms and standard schemes.</p> <p>Determine the principles of treatment of the disease (according to list 2), in a health care facility, at home at the patient and at the stages of medical evacuation, including field conditions, based on a preliminary clinical diagnosis, using knowledge about the person, his organs and systems, adhering to the relevant ethical and legal norms, by making an informed decision according to existing algorithms and standard schemes.</p>
SC ₇	SO ₇	<p>Establish a diagnosis (according to list 3) by making an informed decision and assessing the human condition, under any circumstances (at home, on the street, health care facility, its units), including in an emergency, in the field, in conditions of lack of information and limited time, using standard methods of physical examination and possible anamnesis, knowledge about the person, his organs and systems, adhering to the relevant ethical and legal norms.</p>

SC ₈	SO ₈	Determine the tactics of emergency medical care, under any circumstances, using knowledge about the person, his organs and systems, adhering to the relevant ethical and legal norms, by making an informed decision, based on the diagnosis of emergency (list 3) for a limited time using standard schemes.
SC ₉	SO ₉	Provide emergency medical care, under any circumstances, using knowledge of the person, his organs and systems, adhering to the relevant ethical and legal norms, by making an informed decision, based on a diagnosis of emergency (list 3) for a limited time according to the defined tactics using standard schemes.
SC ₁₀	SO ₁₀	Organize medical and evacuation measures among the population and servicemen, in emergency situations, including in the field, during the detailed stages of medical evacuation, taking into account the existing system of medical and evacuation support.
SC ₁₁	SO ₁₁	Perform medical manipulations (according to list 5) in a medical institution, at home or at work on the basis of previous clinical diagnosis and / or indicators of the patient's condition, using knowledge of the person, his organs and systems, adhering to relevant ethical and legal norms, by making informed decisions and using standard techniques.
SC ₁₂	SO _{12.1}	<p>In a medical institution on the basis of anamnestic data, general examination, bimanual, external and internal obstetric examination of pregnant women and mothers, using knowledge about the person, his organs and systems, adhering to relevant ethical and legal norms, by making an informed decision using standard procedure:</p> <ul style="list-style-type: none"> • assess the general condition of the pregnant woman, parturient and parturient; • determine the duration of pregnancy; • determine the expected date of birth and fetal weight; • determine and estimate the size of the female pelvis; • determine and evaluate the topography of the fetus in the uterus • determine the tactics of pregnancy; • determine and assess the condition of the fetus during pregnancy; • determine the tactics of childbirth; • assess the general condition of the newborn; • assess the condition of manure; • determine the state of involution of the uterus; • prescribe rational breastfeeding to pregnant women, children of the first year of life and developmental delay, premature babies; • assess the condition of lochia and lactation. •
	SO _{12.2}	In a medical institution on the basis of anamnestic data, general examination and gynecological examination of a woman, using

		<p>knowledge of a woman's reproductive organs, adhering to the relevant ethical and legal norms, by making an informed decision, using a standard procedure:</p> <ul style="list-style-type: none"> • evaluate the patient and medical criteria for the acceptability of the method of contraception; • determine the plan of examination of the patient before choosing a method of contraception; • provide family planning counseling; • select a modern method of contraception for different categories of the population. •
SC 13	SO 13.1	<p>To form, in the conditions of a health care institution, its division on production, using the generalized procedure of an estimation of a state of human health, knowledge of the person, its bodies and systems, adhering to the corresponding ethical and legal norms, by acceptance of the reasonable decision, among the fixed contingent of the population. :</p> <ul style="list-style-type: none"> • dispensary groups of patients; • groups of healthy people who are subject to dispensary supervision (newborns, children, adolescents, pregnant women, representatives of professions that must undergo a mandatory dispensary examination). •
	SO13.2	<p>Implement a system of anti-epidemic and preventive measures in the health care institution, its unit on the basis of data on the health status of certain contingents of the population and the impact on the environment, using existing methods, within the primary health care, of:</p> <ul style="list-style-type: none"> • organization of nutrition, water supply; • mode of activity and rest; • formation of a favorable production environment; • primary prevention of diseases and injuries; • vaccine prophylaxis; • prevention of bad habits; • prevention of unwanted pregnancy; • promotion of a healthy lifestyle. •
	SO 13.3	<p>Implement a system of primary prevention measures, based on data on the health status of the population served and the presence of the determinants of health, in the health care facility and outside it using existing methods, within the primary care. sanitary assistance to the population:</p> <ul style="list-style-type: none"> • sanitary and educational measures to prevent the occurrence of infectious and non-infectious diseases, injuries and promote a healthy lifestyle;

		<ul style="list-style-type: none"> • organization of rational nutrition, safe social and living conditions, water supply; • mode of activity and rest. •
	SO 13.4	<p>Organize secondary and tertiary prevention measures among the assigned population, using a generalized procedure for assessing human health (screening, preventive medical examination, medical treatment), knowledge about the person, his organs and systems, adhering to the relevant ethical and legal norms, by making an informed decision, in a health care facility, in particular:</p> <ul style="list-style-type: none"> • to form dispensary supervision groups; • to organize medical and health-improving measures differentiated from the group of medical examination. •
SC ₁₄	SO 14.1	To plan measures to prevent the spread of infectious diseases (according to list 2) in the health care facility, its unit based on the results of epidemiological surveys of infectious diseases, epidemiological analysis, using existing preventive and anti-epidemic methods.
	SO _{14.2}	<p>Carry out in the conditions of a health care institution, its subdivision:</p> <ul style="list-style-type: none"> • detection and early diagnosis of infectious diseases (according to list 2); • primary anti-epidemic measures in the center of infectious disease. •
	SO 14.3	To identify in the conditions of the health care institution, its subdivision using statistical and laboratory methods of risk group, risk areas, time of risk, risk factors and carry out epidemiological analysis of infectious diseases of the population.
SC ₁₅	SO 15	<p>In the health care facility, or at the patient's home on the basis of the obtained data on the patient's health, using standard schemes, using knowledge about the person, his organs and systems, adhering to relevant ethical and legal norms, by making an informed decision:</p> <ul style="list-style-type: none"> • determine the tactics of examination and secondary prevention of patients subject to dispensary supervision; • determine the tactics of examination and primary prevention of healthy individuals subject to dispensary supervision; • calculate and prescribe the necessary food for children in the first year of life. •
SC ₁₆	SO 16	Determine the presence and degree of limitations of life, type, degree and duration of disability with the issuance of relevant documents, in a health care facility on the basis of data on the disease and its course, features of professional activity.
SC ₁₇	SO 17	<p>Under the conditions of a health care institution, its subdivision:</p> <ul style="list-style-type: none"> • prepare an annual report on personal production activities, using official accounting documents, in a generalized form;

		<ul style="list-style-type: none"> • keep medical records of the patient and the population (outpatient / inpatient card, medical history, individual pregnancy card, exchange card, birth history, sanatorium card, certificate of incapacity, MSEC documentation, etc.), using standard technology, based on regulatory documents. •
SC ₁₈	SO _{18.1}	<p>On the territory of service according to standard methods of descriptive, analytical epidemiological and medical-statistical researches:</p> <ul style="list-style-type: none"> • conduct screening for major non-communicable diseases; • evaluate in the dynamics and in comparison with the average static data indicators of morbidity, including chronic non-communicable diseases, disability, mortality, integrated health indicators; • identify risk factors for the occurrence and course of diseases; • to form risk groups of the population. •
	SO _{18.2}	<p>Under any circumstances, using standard procedures, including modern computer information technology, be able to:</p> <ul style="list-style-type: none"> • determine the source and / or location of the required information depending on its type; • receive the necessary information from a specific source; • analyze the information received. •
SC ₁₉	SO _{19.1}	<p>In the conditions of a health care institution, its subdivision according to standard methods:</p> <ul style="list-style-type: none"> • identify negative environmental factors on the basis of data from the health institution by comparing them with existing norms and standards; • analyze the state of health of a certain contingent on the basis of official data by comparing it with average indicators; • determine the relationship between the state of the environment and the state of health of a particular contingent on the basis of data about them; • Develop preventive measures based on data on the relationship between the state of the environment and the state of health of a particular contingent. •
	SO _{19.2}	<p>To analyse morbidity of the population, identifying risk groups, risk areas, time of risk, risk factors, in the conditions of the health care institution, its subdivision, using statistical and laboratory methods.</p>
	SO _{19.3}	<p>Assess the impact of socio-economic and biological determinants on the health of the individual, family, population, in the service area according to standard methods and on the basis of epidemiological and medical-statistical studies.</p>
SC ₂₀	SO _{20.1}	<p>In the conditions of a health institution according to standard methods on the basis of official statistical data:</p>

		<ul style="list-style-type: none"> • to study the volume and effectiveness of the doctor, department, health care institution in the dynamics and when comparing them with the average static and the best in the field of activity; • identify defects in activities and the reasons for their formation •
	SO 20.2	<p>In the conditions of a health care institution or its subdivision according to standard methods:</p> <ul style="list-style-type: none"> • select and use unified clinical protocols for the provision of medical care, developed on the basis of evidence-based medicine; • participate in the development of local protocols for medical care; • control the quality of medical care on the basis of statistical data, expert evaluation and sociological research data using indicators of structure, process and results of activities; • identify factors that hinder the improvement of the quality and safety of medical care. •
	SO 20.3	<p>In the conditions of the institution, health care unit according to standard methods:</p> <ul style="list-style-type: none"> • estimate the cost of medical services; • justify the choice of an adequate method of financing (payment), the choice of rational forms of organization of medical services; • apply methods of economic analysis when choosing methods of diagnosis, prevention, treatment, rehabilitation (cost minimization, cost efficiency, cost-effectiveness). •
SC ₂₁	SO 21.1	<p>In the conditions of a health care institution, adhering to the relevant ethical and legal norms, by making an informed decision to take measures:</p> <ul style="list-style-type: none"> • organize the work of medical staff in a team, unit, institution; • to form rational medical routes of patients; • organize interaction with colleagues in your institution and in other health care institutions, subordinates and managers; • organize interaction with organizations and institutions outside the health sector. •
	SO 21.2	<p>To apply tools to promote medical services on the market, based on the analysis of the needs of the population, in the conditions of functioning of the health care institution, its subdivision, in a competitive environment.</p>

Matrix of correspondence of learning outcomes and competencies

Program learning outcomes	Competencies																														
	General competencies										Special (professional) competencies																				
	Ability to solve typical and complex specialized tasks and practical problems in a professional activity in the field of health care, or in the process of training, which involves research and / or innovation and is characterized by complexity and uncertainty of conditions and requirements..	Ability to abstract thinking, analysis and synthesis, the ability to learn and master modern knowledge. Ability to apply knowledge in practical situations.	Ability to apply knowledge in practical situations	Knowledge and understanding of the subject area and understanding of professional activity.	Ability to adapt and act in a new situation.	Ability to make informed decisions; work in a team; interpersonal skills.	Ability to communicate in the state language both orally and in writing; ability to communicate in a foreign language.	Skills in the use of information and communication technologies.	Definiteness and perseverance in terms of tasks and responsibilities.	The ability to act socially responsibly and consciously.	The desire to preserve the environment.	Patient interviewing skills.	Ability to determine the required list of laboratory and instrumental studies and evaluate their results.	Ability to establish a preliminary and clinical diagnosis of the disease.	Ability to determine the required mode of work and rest in the treatment of diseases	Ability to determine the nature of nutrition in the treatment of diseases.	Ability to determine the principles and nature of disease treatment.	Ability to diagnose emergencies.	Ability to determine the tactics of emergency medical care	Emergency care skills	Ability to carry out medical and evacuation measures	Skills to perform medical manipulations.	Ability to determine the tactics of physiological pregnancy, physiological childbirth and the postpartum period. Family planning and contraceptive counseling skills	Ability to carry out sanitary and hygienic and preventive measures.	Ability to plan and carry out preventive and anti-epidemic measures against infectious diseases.	Ability to determine the tactics of management of persons subject to dispensary supervision.	Ability to conduct a performance examination.	Ability to keep medical records.	Ability to conduct epidemiological and medical-statistical studies of public health; processing of state, social, economic and medical information;	Ability to assess the impact of the environment, socio-economic and biological determinants on the health of the individual, family, population	Ability to analyze the activities of a doctor, department, health care institution, to take measures to ensure the quality of medical care and improve the efficiency of medical resources.

		1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	
identify risk factors for the occurrence and course of diseases; to form risk groups of the population. Determine the source and / or location of the required information depending on its type; receive the necessary information from a specific source; process and analyze the received information..																																	
Identify negative environmental factors; analyze the state of health of a certain contingent; determine the relationship between the state of the environment and the state of health of a particular contingent; develop preventive measures based on data on the relationship between the state of the environment and the state of health of a particular contingent.	Analy sis	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	-	-	+	-	++	+	+	+	+	+	+	+	+	+	+++
		+	+	+	+	+		+	+	+	+	+	+	+	+						+		+	+	+	+	+	+	+	+	+	+	
		+	+	+	+			+		+	+	+	+	+										+	+	+			+	+	+	+	

		1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	
safety of medical care. Estimate the cost of medical services; substantiate the choice of an adequate method of financing (payment) and the choice of rational forms of organization of medical services. Apply methods of economic analysis when choosing methods of diagnosis, prevention, treatment, rehabilitation.																																	
Organize the work of medical staff; to form rational medical routes of patients; organize interaction with colleagues, organizations and institutions; apply tools to promote medical services.	Know ledge applic ation	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	++	+	+	+	+	+	+	+	+	+	+	+++
		+	+	+	+	+	+	+	+	+	+	+	+		+	+		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Emotional (affective) sphere																																	

		1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21		
Form goals and determine the structure of personal activities..	Value orientation	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	++	+	+	+	+	+	+	+	+	+	+++	
		+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Keep to a healthy lifestyle, use the techniques of self-regulation and self-control	Organization and conceptualization	+	+	+	+	+	+	+	+	+	+	-	-	-	-	-	-	-	-	-	-	-	-	+	+	-	-	-	+	+	+	+		
		+	+	+					+	+														+	+				+	+	+			
To be aware of and guided in their activities by civil rights, freedoms and responsibilities, to raise the general educational and cultural level.	Value orientation	+	+	+	+	+	+	+	+	+	+	+	-	-	+	+	+	+	+	+	+	-	++	+	+	+	+	+	+	+	+	+	+	
		+	+	+		+	+	+	+	+	+								+	+	+		+	+	+	+	+	+	+	+	+	+	+	
Keep to the requirements of ethics, bioethics and deontology in their professional activities.	Organization and conceptualization	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	++	+	+	+	+	+	+	+	+	+	+	++
		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Organize the necessary level of individual safety (own and persons cared for) in case of typical dangerous situations in the individual field of activity..	Organization and conceptualization	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	-	-	-	+	+	+	
		+	+	+	+	+			+	+	+	+	+					+	+	+	+	+	+	+	+	+								
Psychomotor sphere																																		

		1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	
Perform medical manipulations (according to list 5).	Manipulation	+	+	+	+	+	+	+	+	+	-	+	+	+	-	-	+	+	+	+	+	+	++	+	-	+	-	+	+	-	+	+	
		+	+	+	+	+		+	+	+			+	+	+			+	+	+	+		+	+			+	+	+		+	+	+
			+	+	+	+				+			+	+	+			+	+	+	+		+					+	+			+	+

Notes: the number of "+" signs reflects the influence of the component on the formation of the program learning outcome:

"+++" - this component dominates the program;

"++" - this component is sufficient in the program;

"+" - this component does not make a significant contribution to the program;

"-" - this component is not assimilated in the learning process.

4. REQUIREMENTS TO THE PREVIOUS LEVEL OF APPLICANTS' EDUCATION

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 an external independent evaluation of the quality of education.

5. SCOPE OF THE PROGRAM BY REGULATORY AND SELECTIVE PARTS

The volume of the educational-professional program is 360 ECTS credits. The normative part of the program

is 339 ECTS credits (94.2%). The optional size is 21 ECTS credits (5.8%). Given the peculiarities of the industry and the specifics of the professional activities of professionals qualified "Doctor", the implementation of paragraph 15 of Article 62 of the Law of Ukraine "On Higher Education" in full is impossible.

At least 75% of the educational program should be aimed at the formation of general and special (professional) competencies in the specialty, defined by the standard of higher education.

6. DISTRIBUTION OF LEARNING OUTCOMES BY TYPE OF LEARNING ACTIVITY

Competencies to be acquired by an applicant	Program learning outcomes	Name of subjects, practical work
Normative content of education		
I. Cycle of general (humanitarian, socio-economic and natural science) training		
GC ₆	GO ₆	Foreign language
GC ₉	GO ₉	History of Ukraine and History of Ukrainian culture
GC ₁	GO ₁	Philosophy
GC ₆	GO ₆	Ukrainian language (for professional purposes)
GC ₁₇	SO ₁₇	Latin language and medical terminology
GC ₃	GO ₃	History of medicine
GC ₁₉	SO ₁₉	Medical biology
GC ₂	SO ₂	Medical and biological physics
GO ₇ GC ₁₈	GO ₇ SO _{18.2}	Medical informatics
GC ₂	SO ₂	Medical chemistry
GC ₂ , GC ₃	SO ₂ , SO _{3.1} , SO _{3.2}	Biological and bioorganic chemistry
GC ₁ , GC ₃	SO ₁ , SO _{3.1} , SO _{3.2}	Human anatomy
GC ₂ , GC ₃	SO ₂ , SO _{3.1} , SO _{3.2}	Histology, cytology and embryology

GC ₁ ,GC ₂ ,GC ₃	SO ₁ ,SO ₂ , SO _{3.1} , SO _{3.2}	Physiology
GC ₁₃ ,GC ₁₄ ,GC ₁₉	SO _{13.2} , SO ₁₄ , SO _{19.3}	Microbiology, virology and immunology
II. Cycle of professional education		
SC ₁₉	SO _{19.1}	Safety of vital functions, fundamentals of bioethics and biosafety
SC ₂ ,SC ₃ SC ₁₉	SO ₂ ,SO _{3.1} , SO _{3.2} , SO _{19.3}	Pathomorphology
SC ₂ ,SC ₃ SC ₁₉	SO ₂ ,SO _{3.1} , SO _{3.2} , SO _{19.3}	Pathophysiology
SC ₆	SO ₆	Pharmacology
GC ₁₀ , SC ₁₃	GC ₁₀ , SO _{13.2} , SO _{13.3}	Hygiene and ecology
SC ₁ ,SC ₃	SO ₁ , SO _{3.1} , SO _{3.2}	Propedeutics (Introduction) to internal medicine
SC ₁ ,SC ₃	SO ₁ , SO _{3.1} , SO _{3.2}	Propedeutics (Introduction) to pediatrics
SC ₁ ,SC ₃	SO ₁ , SO _{3.1} , SO _{3.2} .	General surgery
SC ₁ ,SC ₅ , SC ₁₁	SO ₁ , SO ₅ , SO ₁₁ .	Care of patients
SC ₃ ,SC ₅ , SC ₁₁	SO ₃ , SO ₅ , SO ₁₁ .	Practical training as a nurse
SC ₃	SO _{3.1} , SO _{3.2}	Radiology
SC ₂ ,SC ₃ , SC ₄ , SC ₁₁ ,SC ₁₅ SC ₂₀	SO ₂ , SO _{3.1} , SO _{3.2} , SO ₄ , SO ₁₁ , SO ₁₅ , SO _{20.2}	Internal medicine
SC ₂ ,SC ₃ , SC ₄ , SC ₁₁ ,SC ₁₅ SC ₂₀	SO ₂ , SO _{3.1} , SO _{3.2} , SO ₄ , SO ₁₁ , SO ₁₅ , SO _{20.2}	Pediatrics
SC ₂ ,SC ₃ , SC ₄ , SC ₁₁ ,SC ₁₅ SC ₂₀	SO ₂ , SO _{3.1} , SO _{3.2} , SO ₄ , SO ₁₁ , SO ₁₅ , SO _{20.2}	Surgery
SC ₂ ,SC ₃ , SC ₁₁ , SC ₁₂ ,SC ₁₅ SC ₂₀	SO ₂ , SO _{3.1} , SO _{3.2} , SO ₁₁ , SO _{12.1} , SO ₁₂ ,SO ₁₅ , SO _{20.2}	Obstetrics and gynecology
SC ₁₃ ,SC ₁₅ , SC ₁₆ , SC ₁₇ ,SC ₁₈ SC ₁₉ , SC ₂₀ ,SC ₂₁	SO _{13.4} , SO ₁₅ , SO ₁₆ , SO ₁₇ , SO _{18.1} , SC _{19.1} , SC _{19.2} , SO _{20.1} , SO _{20.3} , SO _{21.1} , SO _{21.2}	Social medicine, organization of health care
SC ₂ ,SC ₃ , SC ₁₁	SO ₂ , SO _{3.1} , SO _{3.2} , SO ₁₁	Urology
SC ₂ ,SC ₃ , SC ₁₁	SO ₂ , SO _{3.1} , SO _{3.2} , SO ₁₁	Otorhinolaryngology
SC ₂ ,SC ₃ , SC ₁₁	SO ₂ , SO _{3.1} , SO _{3.2} , SO ₁₁	Ophthalmology
SC ₂ ,SC ₃ , SC ₁₁	SO ₂ , SO _{3.1} , SO _{3.2} , SO ₁₁	Neurology
SC ₂ ,SC ₃ , SC ₁₅	SO ₂ , SO _{3.1} , SO _{3.2} , SO ₁₅	Medical psychology
SC ₂ ,SC ₃ , SC ₁₅	SO ₂ , SO _{3.1} , SO _{3.2} , SO ₁₅	Psychiatry, narcology
SC ₂ ,SC ₃ , SC ₁₁	SO ₂ , SO _{3.1} , SO _{3.2} , SO ₁₁	Dermatology, sexually transmitted diseases
SC ₄ ,SC ₁₃	SO ₂ , SO _{13.4}	Physical rehabilitation, sports medicine
SC ₁₆ ,SC ₂₁ , GC ₈	SC ₁₆ ,GO ₈ ,SC _{21.1} ,	Forensic medicine. Medical legislation of Ukraine
SC ₁ ,SC ₂ , SC ₃ ,SC ₁₁ ,GC ₂	SO ₁ , SO ₂ , SO _{3.1} ,SO _{3.2} , SO ₁₁ , GO ₂	Practical training as a physician
SC ₂ ,SC ₃ , SC ₁₄ , SC ₂₀	SO ₂ , SO ₃ , SO _{14.1} , SO _{14.2} , SC _{20.2}	Infectious diseases
SC ₁₃ , SC ₁₄ , SC ₁₈ , SC ₁₉	SO _{13.1} , SO _{13.2} , SO _{13.3} , SO _{14.2} , SO _{14.3} , SO _{18.1} , SC _{19.3}	Epidemiology and principles of evidentiary medicine
SC ₄ , GC ₉	SO ₄ , GO ₉	Palliative and hospice medicine

SC ₂ , SC ₃ , SC ₁₁ , SC ₁₅	SO ₂ , SO _{3.1} , SO _{3.2} , SO ₁₁ , SO ₁₅	Oncology and medical radiology
SC ₂ , SC ₃ , SC ₁₁	SO ₂ , SO _{3.1} , SO _{3.2} , SO ₁₁	Traumatology and orthopedics
SC ₂ , SC ₃ , SC ₄ , SC ₁₁ , SC ₂₀	SO ₂ , SO _{3.1} , SO _{3.2} , SC ₄ , SO ₁₁ , SC _{20.2}	Phthisiology
SC ₂ , SC ₃ , SC ₇ , SC ₈ , SC ₉ , SC ₁₁ , SC ₂₀	SO ₂ , SO _{3.1} , SO _{3.2} , SO ₇ , SO ₈ , SO ₉ , SO ₁₁ , SC _{20.2}	Anesthesiology and intensive care
SC ₇ , SC ₈ , SC ₉ , SC ₂₀ , GC ₄	SO ₇ , SO ₈ , SO ₉ , SC _{20.2} , GO ₄	Emergency and acute care
SC ₃ , SC ₄ , SC ₁₁ , SC ₁₅ , SC ₂₁	SO _{3.1} , SO _{3.2} , SO ₄ , SO ₄ , SO ₁₁ , SO ₁₅ , SO ₂₁	General practice (family medicine)
SC ₁ , SC ₁₁	SC ₁ , SO ₁₁	Clinical Anatomy and Operative Surgery
SC ₁₄ , SC ₁₉ , SC ₂₁ , GC ₅	SO _{14.3} , SC _{19.1} , SC _{19.2} , SC _{21.1} , GO ₅	Occupational Safety in the field
Variable training cycle		
GC ₁ , GC ₂ , GC ₃ , GC ₄ , GC ₅ , GC ₆ , GC ₇ , GC ₈ , GC ₉ , GC ₁₀ , SC ₆ , SC ₇ , SC ₈	GO ₁ , GO ₂ , GO ₃ , GO ₄ , GO ₅ , GO ₆ , GO ₇ , GO ₈ , GO ₉ , GO ₁₀ , SO ₆ , SO ₇ , SO ₈	Disciplines for election <i>(the list is given in the appendix)</i>

7. DISTRIBUTION OF THE PROGRAM BY TYPES OF EDUCATIONAL ACTIVITY

№	Type of educational activity	Number of ECTS credits	Number of hours
I. NORMATIVE PART		339	10170
Humanitarian and socio-economic training			
1	Foreign Language	3	90
2	Ukrainian language (for professional purposes)	3	90
3	History of Ukraine and History of Ukrainian culture	3	90
4	Philosophy	3	90
Total		12	360
Natural science education			
5	Foreign language (for professional purposes)	16	180
6	Latin language and medical terminology	3	90
7	History of medicine	3	90
8	Medical biology	5,5	165
9	Medical and biological physics	4	120
10	Medical informatics	3,5	105
11	Medical chemistry	4	120
12	Biological and bioorganic chemistry	9,5	285
13	Human anatomy	14,5	435
14	Histology, cytology and embryology	11,5	345

15	Physiology	10	300
16	Microbiology, virology and immunology	8,5	255
Total		93	2790
Professional education			
17	Safety of vital functions, fundamentals of bioethics and biosafety	3	90
18	Pathomorphology	7	210
19	Pathophysiology	7	210
20	Pharmacology	7	210
21	Hygiene and ecology	9	270
22	Propedeutics (Introduction) to internal medicine	6	180
23	Propedeutics (Introduction) to pediatrics	5	150
24	General surgery	6	180
25	Care of patients	5	150
26	Practical training as a nurse	3	90
27	Radiology	4	120
28	Internal medicine	32,5	975
29	Pediatrics	20	600
30	Surgery	22	660
31	Obstetrics and gynecology	11,5	345
32	Social medicine, organization of health care	9	270
33	Urology	3	90
34	Otorhinolaryngology	3	90
35	Ophthalmology	3	90
36	Neurology	4	120
37	Medical psychology	3	90
38	Psychiatry, narcology	3	90
39	Dermatology, sexually transmitted diseases	3	90
40	Physical rehabilitation, sports medicine	3	90
41	Forensic medicine. Medical legislation of Ukraine	3	90
42	Practical training as a physician	10	300
43	Infectious diseases	6,5	195
44	Epidemiology and principles of evidentiary medicine	3	90
45	Palliative and hospice medicine	3	90
46	Oncology and medical radiology	4	120
47	Traumatology and orthopedics	3	90
48	Phthisiology	3	90
49	Anesthesiology and intensive care	3	90
50	Emergency and acute care	3	90
51	General practice (family medicine)	4,5	135
52	Clinical Anatomy and Operative Surgery	3	90
53	Occupational Safety in the field	3	90
Total		234	7020
II. VARIATIVE PART		21	630
54	Disciplines for election <i>(the list is given in the appendix)</i>	21	630
III. PHYSICAL TRAINING		0	320
IV. CERTIFICATION		0	60

TOTAL	360	11180
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8. REQUIREMENTS FOR THE STRUCTURE OF PROGRAMS OF COURSES AND PRACTICES

Master's learning outcomes are defined by a type of educational activity as a specification of the program (integrative) learning outcomes in the programs of academic disciplines and practices and are used as criteria for selecting the necessary content modules and relevant learning elements.

Connection of the educational program with the training programs by types of educational activity ensures the quality of higher education at the design stage.

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

9. GENERAL REQUIREMENTS FOR DIAGNOSTIC TOOLS

The information base for the creation of diagnostic tools for final control should be the expected learning outcomes by the types of educational activity.

Graduation certification is carried out by assessing the degree of competencies' formation. The form of certification is a standardized test exam and a practice-oriented final exam.

10. TERMS OF STUDY

Training is carried out only on a full-time (full-time) basis

Term of study - 6 years.

11. STRUCTURAL AND LOGICAL SCHEME

Sequence of the applicant's educational activities:

Year of study	Types of academic activity
1-st (60 ECTS credits)	Normative courses (56 ECTS credits) Disciplines for election (4 ECTS credits)
2-й рік (60 ECTS credits)	Normative courses (56 ECTS credits) Disciplines for election (4 ECTS credits)
3-й рік (60 ECTS credits)	Normative courses (57 ECTS credits) Disciplines for election (3 ECTS credits)
4-й рік (60 ECTS credits)	Normative courses (57 ECTS credits) Disciplines for election (3 ECTS credits)
5-й рік (60 ECTS credits)	Normative courses (57 ECTS credits) Disciplines for election (3 ECTS credits)
6-й рік (60 ECTS credits)	Normative courses (56 ECTS credits) Disciplines for election (4 ECTS credits)

Sequence of the applicant's educational activities by years:

№	Name of the course	Distribution by years
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		1	2	3	4	5	6
1	Foreign Language	*					
2	Ukrainian language (for professional purposes)	*					
3	History of Ukraine and History of Ukrainian culture	*					
4	Philosophy	*					
5	Foreign language (for professional purposes)		*				
6	Latin language and medical terminology	*					
7	History of medicine	*					
8	Medical biology	*					
9	Medical and biological physics	*					
10	Medical informatics		*				
11	Medical chemistry	*					
12	Biological and bioorganic chemistry	*	*				
13	Human anatomy	*	*				
14	Histology, cytology and embryology	*	*				
15	Physiology		*				
16	Microbiology, virology and immunology		*	*			
17	Life Safety; basics of bioethics and biosafety	*					
18	Pathomorphology			*			
19	Pathophysiology			*			
20	Pharmacology			*			
21	Hygiene and ecology		*	*			*
22	Propedeutics (Introduction) to internal medicine			*			
23	Propedeutics (Introduction) to pediatrics			*			
24	General surgery			*			
25	Care of patients		*				
26	Practical training as a nurse			*			
27	Radiology			*			
28	Internal medicine				*	*	*
29	Pediatrics				*	*	*
30	Surgery				*	*	*
31	Obstetrics and gynecology				*	*	*
32	Social medicine, organization of health care			*	*		*
33	Urology				*		
34	Otorhinolaryngology				*		
35	Ophthalmology				*		
36	Neurology				*		
37	Medical psychology			*			
38	Psychiatry, narcology				*		
39	Dermatology, sexually transmitted diseases				*		
40	Physical rehabilitation, sports medicine				*		
41	Forensic medicine. Medical legislation of Ukraine				*		
42	Practical training as a physician				*	*	
43	Infectious diseases I					*	*
44	Epidemiology and principles of evidentiary medicine					*	
45	Palliative and hospice medicine						*

46	Oncology and medical radiology					*	
47	Traumatology and orthopedics					*	
48	Phthisiology					*	
49	Anesthesiology and intensive care					*	
50	Emergency and acute care					*	
51	General practice (family medicine)						*
52	Clinical Anatomy and Operative Surgery		*				
53	Occupational Safety in the field		*				
54	Disciplines for election	*	*	*	*	*	*
55	Physical training	*	*				
	Certification			*			*

12. REQUIREMENTS FOR THE EXISTENCE OF THE SYSTEM OF INTERNAL QUALITY SUPPORT OF HIGHER EDUCATION

Internal quality support of higher education is carried out in accordance with the Regulations on the organization of the educational process at V.N. Karazin Kharkiv National University (internal quality support system), which provides for the implementation of the following **procedures and measures**:

- 1) definition of principles and procedures for quality support of higher education;
- 2) monitoring and periodic review of educational programs;
- 3) annual evaluation of applicants for higher education, scientific and pedagogical and pedagogical staff of higher education and regular publication of the results of such evaluations on the official website of the higher education establishment, on information stands and in any other way;
- 4) providing advanced training of pedagogical, scientific and scientific-pedagogical staff;
 - 5) ensuring the availability of the necessary resources for the organization of the educational process, including 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 qualification;
- 8) ensuring an effective system for preventing and detecting academic plagiarism in the scientific works of employees of higher education establishments and applicants for higher education;
- 9) other procedures and measures.

The system of ensuring the quality of educational activities and the quality of higher education (internal quality support system) by a higher education establishment is evaluated by the National Agency for Quality Assurance in Higher Education or its accredited independent institutions for evaluation and quality support of higher education. quality of higher education, approved by the National Agency for Quality Assurance in Higher Education, and international standards and recommendations for quality support in higher education.

13. FINAL PROVISIONS

The educational-professional program is put into effect from 01.09.2017 in accordance with the decision of the Academic Council of V.N.Karazin Kharkiv National University (Protocol № 13 from 31.10.2016), published on the university website before admission to study in accordance with the Rules of admission .

Changes to the educational and professional program are made by the heads of departments to the Educational and Methodological Center, which considers them and presents them at the Academic Council of V.N.Karazin Kharkiv National University. After approval by the Academic Council of the University and the order of the Rector, changes are made to the educational and professional training program.

List 1 (syndroms and symptoms)

- 1) amenorrhea
- 2) anemic syndrome
- 3) anuria and oliguria
- 4) hypertension
- 5) arterial hypotension
- 6) chest pain
- 7) abdominal pain
- 8) pain in the extremities and back
- 9) pain in the perineum
- 10) sore throat
- 11) vomiting
- 12) bronchoobstructive syndrome
- 13) bulbar syndrome
- 14) effusion into 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) shortness of breath
- 28) asphyxia
- 29) constipation
- 30) dizziness,

- 31) cardiomegaly
- 32) cough
- 33) intestinal obstruction
- 34) hemoptysis
- 35) lymphadenopathy
- 36) meningeal syndrome
- 37) uterine bleeding
- 38) edematous syndrome
- 39) paresis, paralysis
- 40) polyuria
- 41) portal hypertension
- 42) speech disorders (aphasia)
- 43) heart rhythm and conduction disorders
- 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) weight loss
- 54) cyanosis
- 55) partial or complete loss of vision
- 56) partial or complete hearing loss
- 57) gastrointestinal bleeding

List 2 (diseases)

I. I. Diseases of the blood and blood-forming organs, disorders involving the immune mechanism:

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

II. Mental and behavioral disorders:

- 1) bipolar affective disorder
- 2) acute psychosis, including alcoholic delirium
- 3) epilepsy
- 4) neurotic disorders
- 5) personality disorders
- 6) schizophrenia

III. Diseases of the nervous system:

- 1) intracranial trauma
- 2) meningitis, encephalitis
- 3) migraine and other types of headaches
- 4) perinatal encephalopathy
- 5) disorders of the autonomic nervous system
- 6) cerebrovascular disorders
- 7) vertebrogenic diseases of the nervous system, neuropathy and polyneuropathy
- 8) multiple sclerosis
- 9) chronic occupational injuries (vibration disease, occupational dyskinesias)

Eye diseases:

- 1) blepharitis

- 2) acute attack of glaucoma
- 3) conjunctivitis
- 4) a foreign body of the eye
- 5) eye injuries
- 6) retinopathy

Diseases of the throat, ears, nose:

- 7) laryngitis
- 8) otitis
- 9) peritonsillar abscess
- 10) sinusitis
- 11) tonsillitis

IV. Diseases of the cardiovascular system:

- 12) aortic aneurysms
- 13) atherosclerosis
- 14) varicose veins of the lower extremities
- 15) congenital heart disease
- 16) secondary arterial hypertension
- 17) acute occlusion of the main and peripheral arteries;
- 18) endocarditis
- 19) essential and secondary arterial hypertension
- 20) coronary heart disease
- 21) carditis
- 22) cardiomyopathy
- 23) pulmonary heart
- 24) acquired heart defects
- 25) obliterating endarteritis
- 26) pericarditis
- 27) heart rhythm and conduction disorders
- 28) heart failure
- 29) injuries of the heart and blood vessels

- 30) pulmonary embolism
- 31) phlebitis, thrombophlebitis

V. Respiratory and mediastinal diseases:

- 1) asphyxia
- 2) bronchial asthma
- 3) bronchitis
- 4) bronchiectasis
- 5) bronchopulmonary dysplasia
- 6) congenital malformations of the respiratory system
- 7) respiratory failure
- 8) infectious and destructive lung diseases
- 9) pulmonary insufficiency
- 10) mediastinitis
- 11) cystic fibrosis
- 12) neoplasms of the lungs and mediastinum
- 13) pleurisy
- 14) pneumoconiosis
- 15) pneumonia
- 16) pneumothorax
- 17) respiratory distress syndrome and neonatal pneumonia
- 18) a foreign body in the respiratory tract
- 19) chest injuries (superficial, open)
- 20) chronic obstructive pulmonary disease

VI. Digestive diseases:

- 1) prolapse of the rectum
- 2) peptic ulcer disease
- 3) congenital malformations of the digestive system
- 4) gastroesophageal reflux disease, esophagitis
- 5) gastritis, duodenitis
- 6) acute and chronic hepatitis
- 7) acute intestinal obstruction

- 8) acute and chronic appendicitis
- 9) acute and chronic pancreatitis
- 10) benign diseases of the esophagus
- 11) enteritis, colitis
- 12) inflammatory diseases of the rectum and perianal region
- 13) pinched and unstressed abdominal hernias
- 14) neoplasms of the esophagus, stomach, colon, liver and pancreas
- 15) peptic ulcers of the stomach and duodenum
- 16) peritonitis
- 17) perforation of the hollow organ
- 18) liver failure
- 19) malabsorption syndrome
- 20) stenosis of the gastric pylorus
- 21) abdominal injuries (superficial, open)
- 22) functional gastrointestinal disorders
- 23) diseases of the operated stomach
- 24) cholecystitis, cholangitis, gallstone disease, choledocholithiasis
- 25) cirrhosis of the liver
- 26) gastrointestinal bleeding

VII. Diseases of the genitourinary system:

- 27) renal amyloidosis
- 28) balanitis, balanoposthitis
- 29) congenital malformations of the urinary system
- 30) glomerulonephritis
- 31) dysmetabolic nephropathy
- 32) nephrotic syndrome
- 33) neoplasms of the kidney, urinary tract and prostate
- 34) pyelonephritis
- 35) prostatitis
- 36) urolithiasis
- 37) tubulointerstitial nephritis

- 38) urethritis
- 39) chronic kidney disease
- 40) cystitis

VIII. Diseases of the skin and subcutaneous tissue:

- 41) allergodermatoses (dermatitis, toxidermia, eczema)
- 42) bacterial diseases of the skin and subcutaneous tissue, pyoderma
- 43) purulent-inflammatory diseases of the fingers and hands
- 44) purulent-inflammatory diseases in children and newborns
- 45) mycoses
- 46) burns and frostbite
- 47) parasitic skin diseases (scabies, lice)
- 48) psoriasis
- 49) vesicular dermatoses
- 50) specific surgical infection (anaerobic clostridial and non-clostridial)

IX. Diseases of the musculoskeletal system and connective tissue:

- 51) ankylosing spondylitis
- 52) congenital and acquired malformations of the musculoskeletal system
- 53) acute rheumatic fever
- 54) dermatomyositis and polymyositis
- 55) neoplasms of the musculoskeletal system
- 56) osteoarthritis
- 57) osteomyelitis
- 58) gout
- 59) polytrauma
- 60) reactive arthritis
- 61) rheumatoid arthritis
- 62) systemic scleroderma
- 63) systemic lupus erythematosus
- 64) systemic vasculitis (nodular polyarteritis, hemorrhagic vasculitis, hypersensitive vasculitis)
- 65) typical fractures of the bones of the shoulder, forearm, hand, thigh, leg, foot

- 66) pelvic injury
- 67) spinal cord injury
- 68) damage to large joints (hip, knee, ankle, elbow)
- 69) chronic rheumatic disease
- 70) juvenile rheumatoid arthritis

X. Diseases of the endocrine system, eating disorders and metabolic disorders:

- 71) acromegaly
- 72) hyperplasia of the thymus
- 73) hypothyroidism
- 74) malnutrition, protein-energy deficiency
- 75) pituitary dwarfism
- 76) diffuse toxic goiter
- 77) iodine deficiency diseases of the thyroid gland
- 78) diabetes mellitus
- 79) neoplasm of the thyroid gland
- 80) obesity
- 81) congenital dysfunction of the adrenal cortex
- 82) rickets, spasmophilia,
- 83) hereditary metabolic diseases (phenylketonuria)
- 84) hereditary chromosomal disorders (Down's disease, Shereshevsky-Turner syndrome)
- 85) thyroiditis
- 86) thyrotoxicosis
- 87) Itsenko-Cushing's disease and syndrome
- 88) chronic adrenal insufficiency
- 89) diabetes mellitus

XI. Infectious and parasitic diseases:

- 1) bacterial food poisoning
- 2) erysipelas
- 3) botulism
- 4) viral hepatitis
- 5) chickenpox

- 6) congenital infections of the newborn
- 7) helminthiasis
- 8) herpesvirus diseases
- 9) influenza and other acute respiratory viral infections
- 10) diphtheria
- 11) infectious mononucleosis
- 12) candidiasis
- 13) whooping cough
- 14) intestinal bacterial infections
- 15) intestinal viral infections
- 16) measles
- 17) tick-borne viral encephalitis
- 18) rubella
- 19) leptospirosis
- 20) malaria
- 21) meningococcal infection
- 22) especially dangerous viral infections
- 23) mumps infection
- 24) polio
- 25) to hold
- 26) protozoan infections
- 27) rickettsiosis
- 28) anthrax
- 29) sentence
- 30) scarlet fever
- 31) tuberculosis of different localization
- 32) Lyme disease
- 33) disease caused by human immunodeficiency virus (HIV)
- 34) chlamydial infections
- 35) cholera
- 36) plague

Infectious diseases transmitted mainly sexually:

37) gonococcal infection

38) syphilis

XII. Diseases of the female reproductive system:

Pathologies of pregnancy:

39) multiple pregnancy

40) vomiting (vomiting) of pregnant women

41) pregnancy with extragenital pathology

42) fetal distress during pregnancy

43) fetal growth retardation

44) immune conflict during pregnancy

45) bubble drift

46) placenta previa

47) premature detachment of the placenta

48) premature birth and delayed pregnancy

49) ectopic pregnancy

50) preeclampsia and eclampsia

51) spontaneous abortion

Pathology of childbirth and the postpartum period:

52) anomalies of labor

53) pelvic abnormalities, including clinically narrow pelvis

54) fetal distress during childbirth

55) maternity and postpartum hemorrhage

56) incorrect position and presentation of the fetus

57) postpartum septic diseases

58) injuries of the uterus and birth canal

Gynecological diseases:

59) abnormal uterine bleeding

60) ovarian apoplexy

61) infertility

- 62) congenital malformations of the female genitalia
- 63) benign dysplasia of the mammary glands
- 64) benign and precancerous neoplasms of the female genitalia
- 65) endometriosis
- 66) inflammatory diseases of the female genital organs
- 67) malignant neoplasms of the female genitalia
- 68) mastitis
- 69) neuroendocrine syndromes
- 70) breast cancer

List 3 (emergencies):

- 1) asphyxia (including neonatal)
- 2) hypertensive crisis
- 3) acute respiratory failure
- 4) acute urinary retention
- 5) acute adrenal insufficiency
- 6) acute kidney damage
- 7) acute liver failure
- 8) acute heart failure
- 9) acute poisoning, including combat poisons
- 10) acute psychosis
- 11) acute coronary syndrome
- 12) acute radiation and chemical damage, including in the field and in emergencies
- 13) acute cerebral insufficiency
- 14) electric shock
- 15) status epilepticus
- 16) acute bleeding
- 17) acute blood loss syndrome, including in the field and in emergencies
- 18) cardiac arrest
- 19) collapse
- 20) disturbance of consciousness and coma
- 21) renal colic
- 22) biliary colic
- 23) acute anaphylactic reactions
- 24) acute cardiac arrhythmias,
- 25) cold injury, including in the field
- 26) thermal injury, including in the field
- 27) convulsive syndrome
- 28) drowning
- 29) strangulation asphyxia
- 30) normal childbirth

- 31) shocks
- 32) bites of snakes, insects, animals
- 33) penetrating wounds, including during hostilities
- 34) burns, including in the field
- 35) foreign bodies of the respiratory tract, gastrointestinal tract, ENT organs and eyes.

List 4 (laboratory and instrumental research):

- 1) analysis of pleural fluid
- 2) analysis of ascitic fluid
- 3) analysis of synovial fluid
- 4) urine analysis according to Zymnytsky
- 5) analysis of urine by 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) lipids and lipoproteins of blood and their fractions
- 11) blood hormones
- 12) serum ferritin, iron and copper
- 13) creatinine, urea, blood and urine, the rate of point filtration
- 14) blood electrolytes
- 15) blood aminotransferases
- 16) total blood bilirubin and its fractions
- 17) coagulogram
- 18) blood uric acid
- 19) alkaline blood phosphatase
- 20) histomorphological examination of lymph node biopsy
- 21) histomorphological examination of the biopsy of parenchymal organs
- 22) histomorphological examination of the biopsy of mucous membranes
- 23) histomorphological examination 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 Doppler
- 30) general analysis of feces
- 31) general blood test
- 32) general analysis of urine
- 33) general analysis of cerebrospinal fluid
- 34) general analysis of the sternal punctate
- 35) general analysis of sputum
- 36) general immunological profile of blood
- 37) serological reactions in infectious diseases
- 38) rapid 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 (air, water, soil).
- 42) microbiological study of biological fluids and secretions
- 43) radiation measurement (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 abdominal organs
- 47) methods of instrumental visualization of the thoracic cavity
- 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 visualization 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 examination of food 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 defibrillator - cardioverter
- 4) to register a standard ECG in 12 leads
- 5) to temporarily stop external bleeding
- 6) carry out primary surgical treatment of the wound, dressing, removal of skin sutures, including in the field
- 7) apply bandages, including in the field
- 8) install a nasogastric and orogastric tube
- 9) transport immobilization
- 10) to administer drugs (intravenous jet and drip, intraosseous), including in the field
- 11) provide peripheral venous access
- 12) to take blood pressure
- 13) to restore airway patency
- 14) catheterization of the bladder with a soft probe
- 15) nasal tamponade
- 16) the technique of contact of the newborn "skin to skin" and early application to the breast
- 17) finger research of a rectum and by means of a rectal mirror
- 18) a finger examination of the prostate
- 19) clinical examination of mammary glands
- 20) perform a pleural puncture
- 21) determine blood groups, rhesus affiliation
- 22) transfuse blood components and blood substitutes
- 23) to conduct bimanual examination and examination of a woman in mirrors
- 24) perform pelviometry
- 25) to carry out external (Leopold's receptions) and internal obstetric examination

26) to carry out auscultation of a fetus

27) taking smears for bacterioscopic, bacteriological and cytological examinations

Supplement

DISCIPLINES FOR ELECTION

Year of study	Optional courses
I	1. Fundamentals of psychology. 2. Fundamentals of pedagogy. 3. Theory and practice of professional language competence. 4. Speech culture. 5. World civilization. 6. Local lore. 7. European standard of computer literacy. 8. Psychology of communication. 9. Aesthetics. 10. Ethics. 11. Modern problems of molecular biology. 12. Sociology and medical sociology. 13. Jurisprudence. 14. Religious studies. 15. Culturology. 16. Fundamentals of economic theories
II	1. European standard of computer literacy. 2. Logic, formal logic. 3. Deontology in medicine. 4. Physical education and health. 5. Modern problems of biophysics. 6. Foreign language (second). 7. Fundamentals of patent science.
III	1. Modern methods of genetic diagnosis. 2. Theory of cognition and medicine. 3. Ethical issues in medicine. 4. Fundamentals of social psychology. 5. Nutrition. 6. Side effects of drugs. 7. Physical education and health. 8. Foreign language (second). 9. Foreign language (for professional purposes). 10. Medicine and art culture. 11. Fundamentals of Christian ethics and morality.
IV	1. Clinical physiology. 2. Clinical biochemistry. 3. Fundamentals of homeopathy. 4. Phytotherapy. 5. Basics of prevention of smoking, alcoholism, drug addiction and drug addiction. 6. Fundamentals of psychoanalysis. 7. Physical education and health. 8. Medical subculture. 9. Actual problems of physiotherapy, balneology and rehabilitation. 10. Foreign language (for professional purposes). 11. Methodology of evidence-based medicine. 12. Fundamentals of Christian ethics and morality.
V	1. Sectional course. 2. Fundamentals of dentistry. 3. Medical genetics. 4. Radiation medicine. 6. Vascular surgery. 7. Physical education and health. 7. Foreign language (for professional purposes). 8. Age aspects of pharmacotherapy. 9. Fundamentals of sexology and sexopathology. 10. Basics of reflexology. 11. Fundamentals of gerontology and geriatrics. 12. Instrumental methods of functional diagnostics. 13. Current issues of rheumatology. 14. Current issues of gastroenterology. 15. Current issues of pulmonology. 16. Current problems of neurology. 17. Actual problems of clinical pathomorphology. 18. Endoscopic technologies in obstetrics and gynecology. 19. Fundamentals of Christian ethics and morality.
VI	1. Clinical microbiology, virology and immunology. 2. Actual problems of ENT pathology. 3. Non-drug treatments. 4. Endocrinology. 5. Organizational foundations of family medicine. 6. Fundamentals of transplantology. 7. Clinical parasitology and tropical medicine. 8. Current problems of HIV infection. 9. Healthcare management and marketing. 10. Extreme medicine. 11. Plastic and reconstructive surgery. 12. Current issues of cardiac surgery. 13. Organizational issues of palliative and hospice medicine. 14. Current issues of neurosurgery. 15. Current issues of hematology and transfusiology. 16. Current issues of cardiology. 17. Current issues of nephrology. 18. Current issues of

	clinical immunology and allergology. 19. Clinical aspects of immunoprophylaxis. 20. Medical aspects of bioethics and biosafety. 21. Physical education and health. 22. Current issues of cerebrovascular pathology. 23. Evidence-based medicine. 24. Foreign language (for professional purposes). 25. Endoscopic technologies in medicine. 26. Fundamentals of Christian ethics and morality. 27. Medical rehabilitation. 28. Clinical radiology
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