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

_____Boychuk T.M.

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EDUCATIONAL AND PROFESSIONAL PROGRAMM

TO TRAIN PROFESSIONALS AT HIGHER STATE EDUCATIONAL ESTABLISHMENT OF UKRAINE «BUKOVINIAN STATE MEDICAL UNIVERSITY»

PROFESSIONAL AREA SPECIALTY HIGHER EDUCATION LEVEL DEGREE PROFESSIONAL QUALIFICATION 22 Health Care 222 Medicine Second (Master) level Master Doctor of Medicine

PREFACE

1. SUBMITTED BY

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

2. APPROVED BY

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

3. **AUTHORS:** Koloskova O.K., Gerush I.V, Khodorovkyi V.M., Savka I.G., Sydorchuk R.I., Khukhlina O.S., Grutsiuk M.I., Berbets A.M.

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1. INTRODUCTION

1.1. General n	I. INTRODUCTION otion
Higher education	
level	Second (Master) level
Degree awarded	Master
Professional field	22 Health care
Specialty	222 Medicine
Restrictions	
concerning the form	Full-time training only
of studies	
Educational	
qualification	Master of Medicine.
awarded	
Professional	Doctor of Medicine. Physician
qualification	
Qualification in	Doctor of Medicine
Diploma	
Description of	The object of medical activity is public health care, including maintenance of
professional area	health; understanding, prevention and treatment of human diseases, as well as
	effect of medical problems on patients, their families and the whole population.
	Objectives – to ensure academic training on the basic and clinical biomedical
	sciences and train graduates for professional medical activity on an appropriate
	primary position by means of acquiring common and special competence,
	which sphere of application is described at least by the determined lists of
	syndromes and symptoms of diseases, urgent conditions, physiological
	conditions and diseases requiring special tactics of patient management;
	laboratory and instrumental examinations, medical manipulations; issues of
	labor, forensic and military expertise.
	Theoretical contents of professional area: clinical, basic and social subjects, knowledge concerning health care of population; prevention, diagnostics and
	treatment of an person on the individual, family and population level, essential
	for the fulfilment of doctor's professional activity.
	Methods, methodology and techniques:
	anamnestic, clinical, laboratory, instrumental methods of diagnostic process,
	detection of leading symptoms and syndromes, making provisional and clinical
	diagnosis; techniques of diagnostics, treatment and prevention, management
	and organization in the field of health care.
	Instruments and equipment (objects/subjects, apparatus and devices,
	that should be applied and used by an applicant for higher education):
	the commonest up-to-date diagnostic, therapeutic and other devices, objects
	and apparatus to maintain professional activity.
Academic right of	For further professional training a specialist should apply for post-graduate
graduates	programs (Internship, Residency), that implement training according to the
	curricula for doctors in a specific field (approved by the Order of the Ministry
	of Health of Ukraine dated 23.02.2005 No81); or he/she can apply for the
	program to obtain PhD (Doctor of Philosophy).
	In future specialists can apply for retraining courses and acquire another
	medical specialty and perform appropriate work in this field.
Employment of	A specialist trained for work according to ДК 009-2010:
graduates	Section Q. Health care and giving social aid
	Chapter 86.1. activity of therapeutic institutions
	Group 86.10 activity of therapeutic institutions

Class 86.21 general medical training
Class 86.90 other activity in health care
On completion of studies according to the Master's curriculum on specialty "Medicine" a specialist is able to perform the following professional work: intern (code K Π – 3229); trainee (code K Π - 3221); resident (code K Π – XXX).
After training in Internship or Residency a specialist is awarded with the qualification of "Physician in a Certain Specialty"; according to the medical specialty obtained he/she is able to perform professional work indicated in ДК 003: 2010:
Chapter 2 Professionals
Subunit 22 Professionals in the field of science concerning life and medical
sciences
Class 222 Professionals in the field of medicine (except nurses)
Subclass 2221 Professionals in the field of doctoring (except dentistry) Group 2221.2 Physicians
Subclass 2225 Professionals in the field of medical prevention
2225.2 Doctors, specialists in the field of medical prevention
2229.2 Professional in the field of medicine (except nursing and
obstetrics)
Professional names of work – according to the National Classification of
Ukraine: Classification of Profession ДК 003:2010

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

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

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

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

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

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

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

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

- competence list of a graduate;

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

- forms of attestation of applicants for higher education;

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

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

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

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

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

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

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

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

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

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

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

Clear and understandable structure and contents of the curriculum are topical for applicants, learners, teachers and employers.

The educational curriculum is used during:

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

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

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

The educational-professional curriculum is used for:

- compiling educational plans and working educational plans;
- formation of student individual plans;
- formation of programs on educational subjects, practical training, contents of individual ks;

tasks;

- determination of information basis to form the diagnostic means;
- accreditation of the curriculum;
- external quality control of training specialists;
- attestation of Masters on specialty 222 Medicine.

Users of the educational-professional curriculum are:

- applicants for higher education studying at Higher State Educational Establishment of Ukraine

«Bukovinian State Medical University»;

- scientific-pedagogical workers of Higher State Educational Establishment of Ukraine «Bukovinian State Medical University», who provide training of Masters on specialty 222 Medicine;
- Examination Board on Specialty 222 Medicine;
- Acceptance Board, Higher State Educational Establishment of Ukraine «Bukovinian State Medical University».

The educational-professional curriculum applies to the Departments of Higher State Educational Establishment of Ukraine «Bukovinian State Medical University» involved in training of Masters on specialty 222 Medicine.

1.2. Regulations

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

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

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

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

4. Licensing terms concerning implementation of educational activity approved by of the Resolution of the Cabinet of Ministers of dated on December 30, 2015, N_{2} 1187 (edited in the form of the Decision of the Cabinet of Ministers of Ukraine dated on May10, 2018, N_{2} 347).

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

1.3. Terms and their definitions

The terms have the following definitions in the curriculum:

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

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

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

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

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

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

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

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

higher education applicant required to achieve the defined learning outcomes and is accounted for in ECTS credits;

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

27) educational process - an intellectual, creative activity in the field of higher education and

science, which is carried out in the higher educational establishment (scientific institution) through the system of scientific, methodical and pedagogical activities and is aimed at the transfer, mastering, multiplication and use of knowledge, skills and other competencies by students, as well as the formation of a harmoniously developed personality.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

1.4. Abbreviations

NQF - national qualifications frame;

CC - common competence;

SC - special (professional, subject) competence;

GR - general results; SR – special (occupational, subject) results;

2. Master's competence

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

	2.1. General competence according to the National Qualification Frame (NQF)		
GC_1	Ability to abstract thinking, analysis and synthesis, ability to study and be taught		
	currently.		
GC ₂	Ability to apply knowledge in practical situations.		
GC ₃	Knowledge and understanding of the subject sphere and understanding professional		
	activity.		
GC_4	Ability to adaptation and action in a new situation.		
GC ₅	Ability to draw a substantiated decision; to work in training detachment; skills of		
	interpersonal cooperation		
GC_6	Ability to communicate in a state language both orally and written form; ability to		
	communicate in a foreign language		
GC ₇	Skills to use information and communication technologies		
GK ₈	Precision and persistence concerning the determined targets and taken duties		
GC ₉	Ability to act socially, be responsible and conscious		
GC ₁₀	Aspiration for maintaining environment		

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

2.2. Special (professional, subject) competence

Generalized object of the professional activity – population health care, in particular health supporting; understanding, prevention, diagnostics and treatment of a person's diseases, as well as influence of the health problems upon patients, their families and population.

SC1	Skills of questioning and clinical examination of a patient				
SC ₂	Ability to determine the necessary list of the laboratory and instrumental				
	investigations and estimation of their results				
SC ₃	Ability of making provisional and clinical diagnose of a disease				
SC ₄	Ability to define the necessary regime of work and rest when treating disease				
SC ₅	Ability to determine the character of the diet when treating diseases				
SC ₆	Ability to define principles and character of the diseases treatment				
SC ₇	Ability to diagnose urgent conditions				
SC ₈	Ability to determine the approach of providing emergency cover				
SC ₉	Skills of providing emergency cover				
SC10	Ability to carry out medical evacuation measures				
SC11	Skills of carrying out medical manipulations				
SC_{12}	Ability to define the management of conducting physiological pregnancy, physiological				
	labor and afterbirth period. Skills to consult in questions of planning family and choice				
	of contraception method				
SC ₁₃	Ability to conduct sanitary-hygienic and prophylactic measures				
SC ₁₄	Ability to planning and conducting preventive and anti-epidemic measures concerning				
	infectious diseases				
SC15	Ability to determine the policy of conducting persons who are within regular medical				
	check-up				
SC16	Ability to carry out working capacity examination				
SC17	Ability to conduct medical records				
SC18	Ability to carry out epidemiological and medical-statistical investigations of the population				

	health; processing of the state, social, economic and medical information
SC ₁₉	Ability to estimate the influence of the environment, social-economic and biological
	determinants on the condition of health of a person, family, population
SC ₂₀	Ability to conduct the analysis of activity of a doctor, subdivision, health care institution,
	carrying out measures concerning provision of medical aid quality and increase of the
	medical resources use efficacy
SC_{21}	Ability to carry out measures as to organization and integration of providing medical aid to
	the population and conducting marketing of the medical services

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

Competence	Learning outcomes	General learning outcomes according to NQF requirements
CC1	GR1	To know methods of analysis, synthesis and further modern training. Be able to analyze information, make informed decisions, be able to acquire modern knowledge. Establish appropriate links to achieve goals. Be responsible for the timely acquisition of modern knowledge.
CC2	GR2	To have specialized conceptual knowledge gained in the learning process. Be able to solve difficult tasks and problems that arise in professional activities. A clear and unequivocal report of their own conclusions, knowledge and explanations, which justify them, to specialists and non-specialists. Responsible for making decisions in difficult conditions
CC3	GR3	To have a profound 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 activity. To be responsible for professional development, the ability to further professional training with a high degree of autonomy.
CC4	GR4	To know the types and methods of adaptation, the principles of action in a new situation. Be able to apply means of self-regulation, be able to adapt to new situations (circumstances) of life and activity. Establish appropriate connections to achieve the result. To be responsible for the timely use of self- regulation methods.
CC5	GR5	To know tactics and communication strategies, laws and ways of communicative behavior. Be able to make informed decisions, choose ways and strategies for communication to ensure effective teamwork. Be able to make informed decisions, choose ways and strategies for communication to ensure effective teamwork. Be responsible for the choice and tactics of communication.
CC6	GR6	To have a thorough knowledge of the state language and basic knowledge of a foreign language. Be able to apply knowledge of the state language, both verbally and in writing, to be able to communicate in a foreign language. Use professional language and business communication and when preparing documents, the state language. Use a foreign language in professional activities. To be responsible for fluent knowledge of the state language, for the development of professional knowledge.
CC7	GR7	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 industry that needs updating and integrating knowledge. Use information and communication technologies in professional activities. Be responsible for the development of professional knowledge and skills.
CC8	GR8	To know the duties and ways of fulfilling the tasks. Be able to define the purpose and the task of being persistent and conscientious in the performance of duties. Establishing interpersonal relationships to effectively accomplish tasks and responsibilities. Responsible for proper performance of the tasks.
CC9	GR9	To know their social and public rights and responsibilities. Form your own civic consciousness, be able to act in accordance with it. Ability to communicate your social and social position. Responding to your civic position and activity.

CC10	GR10	To know the problems of preserving the environment and how to save it.
		Be able to formulate requirements for themselves and others around the
		environment. To make proposals to the relevant authorities and institutions
		regarding measures for conservation and protection of the environment. To be
		responsible for the implementation of environmental protection measures
		within the scope of its competence.

Competence	Learning outcomes	Special (professional, subject) learning outcomes
SC1	SR1	To collect data on patient complaints, medical history, history of life (including a professional history), in the conditions of the health care institution, its unit or at home in the patient, using the interview results with the patient, according to the standard patient survey scheme. Under any circumstances (in the health care facility, its subdivisions, at the patient's home, etc.), using knowledge of the person, its organs and systems, according to certain algorithms: • collect information about the general condition of the patient (consciousness, constitution) and appearance (skin, subcutaneous fat, palpation of the lymph nodes, thyroid and mammary glands); • assess psychomotor and physical development of the child; • examine the state of the cardiovascular system (examination and palpation of the area of the heart and surface vessels, determination of percussion limits of the heart and vessels, auscultation of the chest, percussion and auscultation of the lungs); • examine the state 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 (abdominal examination, palpation and percussion of the intestines, stomach, liver, spleen, palpation of the pancreas, kidneys, pelvic organs, finger rectal examination); • examine the condition of the musculoskeletal system (examination and palpation); • examine the state of the nervous system; • examine the state of the genitourinary system; • evaluate the condition of fetal fetal development according to the calculation
SC2	SR2	of the weight of the fetus and auscultation of its heartbeat. To evaluate the information about the diagnosis in a health care institution, or its unit, using a standard procedure, using knowledge of the person, its organs and systems, based on the results of laboratory and instrumental examinations (list 4)
SC3	SR3.1 SR3.2	 Under conditions of the health care institution, its subdivision and among the affiliated population: Be able to distinguish and fix the leading clinical symptom or syndrome (list 1) by making a well-founded decision, using historical data of the patient's history, physical examination data of the patient, knowledge of the person, its organs and systems, observing the relevant ethical and legal norms. Be able to identify the most probable or syndromic disease (list 2) by making a reasonable decision by comparing standards using historical evidence of a patient's history and patient survey data, based on the leading clinical symptom or syndrome, using knowledge about the person, his organs and systems, while complying with the relevant ethical and legal standards.
		 assign a laboratory and / or instrumental examination of the patient (on list 4) by making a reasonable decision based on the most probable or syndromic diagnosis, using standardized schemes, using knowledge about the person, his organs and systems, observing the relevant ethical and legal standards. perform differential diagnosis of diseases (list 2) by making a reasonable

		decision, using a certain algorithm, using the most probable or syndromic diagnosis, data of laboratory and instrumental examination of the patient, knowledge of the person, its organs and systems, observing the relevant
		 ethical and legal norms. establish a preliminary clinical diagnosis (list 2) by making a reasonable decision and logical analysis using the most probable or syndromic diagnosis, data of the laboratory and instrumental examination of the patient, conclusions of the differential diagnosis, knowledge of the person, its organs and systems, observing the relevant ethical and legal norms
SC4	SR4	To determine the necessary mode of work and rest in the treatment of the disease (in list 2), in the conditions of the health care institution, at the patient's home and at the stages of medical evacuation, incl. in the field, based on the previous clinical diagnosis, using knowledge about the person, its organs and systems, adhering to the relevant ethical and legal norms, by making a well-founded decision on existing algorithms and standard schemes.
SC5	SR5	To determine the necessary medical nutrition in the treatment of the disease (in list 2), in the conditions of the health care facility, at the patient's home and at the stages of medical evacuation including, in the field, on the basis of the previous clinical diagnosis, using knowledge about the person, her organs and systems, adhering to the relevant ethical and legal standards, by making a well-founded decision based on existing algorithms and standard schemes.
SC6	SR6	To determine the nature of the treatment (conservative, operative) of the disease (on the list 2), in the conditions of the health care institution, at the patient's home and at the stages of medical evacuation, incl. under field conditions on the basis of a previous clinical diagnosis, using knowledge about the person, its organs and systems, adhering to the relevant ethical and legal standards, by making a well-founded decision based on existing algorithms and standard schemes. To determine the principles of treatment of the disease (in list 2), in the conditions of the health care institution, at the patient's home and at the stages of medical evacuation, incl. under field conditions, on the basis of a previous clinical diagnosis, using knowledge about the person, its organs and systems, adhering to the relevant ethical and legal norms, by making a well-founded decision on existing algorithms and standard schemes.
SC7	SR7	To set a diagnosis (on the list 3) by making a reasonable decision and assessing the condition of a person, in all circumstances (at home, on the street, at the healthcare facility, his unit), incl. in conditions of emergency, in the field, under conditions of lack of information and limited time, using standard methods of physical examination and possible history, knowledge of the person, its organs and systems, observing the corresponding ethical and legal norms.
SC8	SR8	To determine the tactics of providing emergency medical care in all circumstances, using knowledge of the person, its organs and systems, observing the relevant ethical and legal norms, by making a well-founded decision, based on the diagnosis of urgency (in list 3) in a limited time for using standard circuits.
SC9	SR9	To provide emergency medical care, under all circumstances, using knowledge of the person, its organs and systems, observing the relevant ethical and legal norms, by making a reasoned decision based on a diagnosis of an urgent condition (on list 3) in a limited time according to the defined tactics, using standard circuits.
SC10	SR10	To organize medical and evacuation measures among the population and military personnel, in an emergency situation, incl. in field conditions, during deployed stages of medical evacuation, taking into account the existing system

		of medical-evacuation support.
0.011	CD 1 1	
SC11	SR11	To perform medical manipulations (on list 5) in a hospital, at home or at
		work based on a previous clinical diagnosis and / or patient status, using
		knowledge of the person, its organs and systems, observing the relevant
		ethical and legal standards, by making a well-founded decision and using
		standard techniques.
SC12	SR12.1	Under conditions of a medical institution on the basis of anamnestic data,
5012	51(12)1	general examination, bimanual, external and internal obstetric examination of
		a pregnant woman and a maternity using knowledge about a person, its organs
		and systems, observing the corresponding ethical and legal norms, by making
		a reasonable decision using the standard procedure to:
		• evaluate the general condition of the pregnant woman, the maternity ward;
		• determine the term of pregnancy;
		• determine the expected term of labor and weight of the fetus;
		• determine and evaluate the size of the female pelvis;
		• identify and evaluate the fetal topography in the uterus
		• determine the tactics of pregnancy;
		• determine and evaluate the condition of the fetus during pregnancy;
		 determine the tactics of labor;
		assess the general condition of the newborn;
		• assess the state of the litter;
		• determine the state of involution of the uterus;
		• provide rational nutrition to pregnant women, children of the first year of life
		and with developmental delay, premature infants;
		• assess the condition of lochia and lactation.
	SR12.2	Under conditions of a medical institution, based on anamnestic data,
		general examination and gynecological examination of a woman, using
		knowledge about reproductive organs of a woman, adhering to the relevant
		ethical and legal norms, by making a well-founded decision using the standard
		procedure:
		•
		• To evaluate the patient and the medical criteria of acceptability of the
		contraceptive method;
		• determine the patient's inspection plan before choosing a contraceptive
		method;
		 provide counseling on family planning issues;
		to carry out the selection of the modern method of contraception for
		different categories of the population.
SC13	SR13.1	To form, under conditions of the health care institution, its unit in the work,
	~	using the generalized procedure for assessing the condition of human health,
		knowledge about the person, its organs and systems, adhering to the relevant
		ethical and legal norms, by making a well-founded decision, among the
		assigned population contingent :
		• dispensary groups of patients;
		• groups of healthy people subject to dispensary supervision (newborns,
		children, adolescents, pregnant women, representatives of professions, who
		must undergo compulsory dispensary examination).

SC13	SR13.2	To implement a system of antiepidemic and prophylactic steps, in
		the conditions of a health care institution, its subvision based on data on
		the health status of certain group of the population and on the presence of
		influence of the environment on it using existing methods, within the
		framework of primary health care for the population, of:
		• organization of rational nutrition, water supply;
		• activity and rest mode;
		• the formation of a favorable production environment;

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		 primary prevention of diseases and injuries;
		 vaccine prophylaxis;
		 prevention of harmful habits;
		• prevention of unwanted pregnancy;
		• promoting a healthy lifestyle.
		r o o o o o o o o o o o o o o o o o o o
	SR13.3	To implement a system of primary prevention steps, based on data on
		the health status of the served population and the presence of
		determinants of health on it, in the conditions of the health care institution
		and outside of it, using existing methods, within the framework of
		primary health care for the population:
		• sanitary and educational measures to prevent the emergence of
		infectious and non-infectious diseases, injuries and promotion of a
		healthy lifestyle;
		• organization of rational nutrition, safe social and living
		conditions,
		water supply;
		 activity and rest mode.
	SR13.4	Organize conduction of secondary and tertiary prevention stepfs
	2111011	among the population of the assigned contingent using the generalized
		procedure for assessing the health status of a person (screening,
		preventive medical examination, medical treatment), knowledge of the
		person, his organs and systems, observing the relevant ethical and legal
		norms, by making a well-founded decision, in the conditions of the health
		care institution, in particular:
		 to form groups of dispensary supervision;
		 to organize medical and recreational activities differentiated from
		the
		group of medical examination.
SC14	SR14.1	Plan measures to prevent the spread of infectious diseases (in list 2)
5014	5114.1	under the conditions of the health care institution, its unit based on the
		results of the epidemiological survey of infectious disease centers, epidemiological analysis, using existing preventive and anti-epidemic
		methods.
	SR14.2	Install in a health care institution, its unit:
	SK14.2	
		• detection and early diagnosis of infectious diseases (in list 2);
		• primary anti-epidemic measures in the center of an infectious disease.
	SR14.3	Detect in a health care institution using its statistical and laboratory
		methods of risk group, risk area, time of risk, risk factor and make an
		epidemiological analysis of infectious diseases of the population.
SC15	SC15.1	In a health care institution or at a patient's home based on the
5015	5013.1	patient's health information, using standardized procedures, using
		knowledge about the person, his organs and systems, following the
		relevant ethical and legal standards, by making a well-founded decision:
		• to define the tactics of examination and secondary prevention of
		patients subject to dispensary supervision;
		 to define the tactics of examination and primary prevention of healthy.
1		healthy

		persons subject to dispensary supervision;
		 to count and assign the necessary food to children in the first year of life.
SC16	SC16.1	Determine the presence and degree of limitation of vital activity, type, degree and duration of disability with the registration of relevant documents, in the conditions of the health care institution on the basis of disease data and its course, the person's specialty professional activities.
SX17	SC17.1	 Under the conditions of the health care institution, its unit: to prepare an annual report on personal production activity, using official accounting documents, in a generalized form; to conduct medical records on the patient and the contingent of the population (outpatient / hospital patient card, medical history, individual birth control card, exchange card, birth history, sanatorium and treatment card, disability paper, documentation for MSEC, etc.)
SC18	SR18.1	 using standard technology on the basis of regulatory documents. On the territory of service on the standard methods of descriptive, analytical epidemiological and medical-statistical research: to conduct screening for the most important non-infectious diseases; to assess the incidence, including chronic non-infectious diseases, disability, mortality, and integral health indicators in the dynamics and in comparison with the average static data; to identify risk factors for the occurrence and course of diseases;
	SR18.2	 to form groups of population risk. Under any circumstances, using standard procedures, including modern computer information technology, be able to: to determine the source and / or location of the required information depending on its type; to receive the necessary information from a specific source; to analyze the received information.
SC19	SR19.1	 In the conditions of the health care institution, its unit according to standard methods: to identify negative environmental factors based on the data of the sanitary and epidemiological institution through comparison with existing norms and standards; to analyze the health status of a contingent based on official data by comparison with the average indicators; to determine the connection between the state of the environment and the health status of a contingent based on the relationship between the state of the environment and the health state of the environment and the health state of the environment and the neutron based on data on the relationship between the state of the environment and the health status of a contingent.
	SC19.2	Analyze the incidence of the population by identifying risk groups, risk areas, time of risk, risk factors, health facilities, and its unit, using statistical and laboratory methods.

	SC19.3	To evaluate the impact of socio-economic and biological
	SC19.5	determinants on the health of the individual, family, population on the
		territory of service on the basis of standard methods and on the basis of
		epidemiological and medical-statistical research data.
8020	6,620,1	
SC20	SC20.1	Under conditions of health care institution according to standard
		methods on the basis of official statistics:
		• to investigate the volume and effectiveness of the activity of a
		doctor,
		a unit, a health care institution in a dynamics and comparing them
		with the average static and the best in the field of activity;
		• to identify defects in activities and the reasons for their formation.
	SC20.2	Under conditions of the health care institution or its subdivision
		according to standard methods:
		• to carry out the selection and use of unified clinical protocols for
		the
		provision of medical care based on evidence-based medicine;
		 take part in the development of local protocols for the provision
		of
		medical care;
		 to carry out quality control of medical services on the basis of
		statistical data, expert evaluation and data from sociological research
		using indicators of structure, process and results of activities;
		• to identify factors that impede the improvement of the quality and
		safety of health care.
	SC20.3	Under the conditions of the institution, the health care unit
		according to standard methods:
		 to evaluate the cost of health services;
		 to substantiate the choice of the adequate method of financing
		(payment), the choice of rational forms of organization of provision
		of medical services;
		 to apply methods of economic analysis in the choice of methods
		of
		diagnosis, prevention, treatment, rehabilitation (minimization of
		costs, cost effectiveness, cost-benefit)
SC21	SC21.1	In the conditions of the health care institution, following the relevant
		ethical and legal norms, by making a well-founded decision to take
		measures:
		• to organize the work of medical staff in a team, unit, institution;
		 to form rational patient medical paths;
		 to organize interaction with colleagues at their institution and in
		other
		health care institutions, subordinates and managers;
		 to organize interaction with organizations and institutions outside
		the
		health sector.
	SC21.2	Apply tools for advancing medical services on the market, based on
		an analysis of the needs of the population, in the conditions of
		functioning of the health care institution, its unit, in a competitive
		environment.

Conformity matrix of learning outcomes and competence

	Curriculum learning outcomes	
	Integral competency Ability to solve typical and complex specialized tasks and practical problems in professional health care activities, or in the process of learning that involves research and/or innovation and is characterized by complexity and uncertainty of the conditions and requirements.	
1	Ability to abstract thinking, analysis and synthesis, ability to learn and master modern knowledge.	
2	Ability to apply knowledge in practical situations.	
3	Knowledge and understanding of the subject area and understanding of professional activities.	
4	Ability to adapt and act in a new situation.	
5	Ability to make sound 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 to	
6		
7	Skills in the use of information and communication technologies.	
8	Certainty and perseverance with regard to tasks and responsibilities.	
9	Ability to act socially responsible and consciously.	
10	The desire to preserve the environment.	
1	Patient interviewing skills.	
2	Ability to determine the necessary list of laboratory and instrumental studies and evaluation of their results.	
3	Ability to establish an initial and clinical diagnosis of the disease.	
4	Ability to determine the necessary mode of work and rest in the treatment of diseases	(
5	Ability to determine the nature of nutrition in the treatment of diseases.	Com
6	Ability to determine the principles and nature of treatment of diseases.	npet
7		ence
8		e
9	Skills to provide emergency medical care	
10	Ability to carry out medical and evacuation measures	
11	Skills to perform medical procedures.	
12	The ability to determine tactics of management of physiological pregnancy, physiological childbirth and the postpartum period. Skills in family planning counselling and selection of contraceptive methods	
13		
14	Ability to plan and carry out preventive and anti-epidemic measures for infectious diseases.	
15	The ability to determine the tactics of registering people subject to medical supervision.	
16	The ability to conduct an examination of the ability to work.	
17	Ability to maintain medical records.	
18	Ability to carry out epidemiological and medical-statistical studies of public health; processing of state, social, economic and medical information:	
19	Ability to assess the impact of the environment, socio-economic and biological determinants on the health of the individual, family, population.	
20	The ability to analyze the activities of a doctor, department, health care institutions, take measures to ensure the quality of medical care and improve the efficiency of the use of medical resources.	
21	Ability to carry out activities for the organization and integration of medical care and marketing of medical services.	

		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
		•	•		•					•	Cog	nitiv	e (gn	ostic)	sphe	re												•				
Collect data on the patient's complaints, anamnesis of illness, anamnesis of life.	Knowledge	+ +	+ + +	+ + +	+ + +	+ +	+ + +	+ +	+ + +	+ +	+	+ + +	+ +	+ + +	+ + +	+ + +	+ + +	+ + +	+ + +	++++	+ +	+ + +	+ +	+ + +	+ +	+						
Evaluate information regarding the diagnosis using a standard procedure based on the results of laboratory and instrumental studies (according to list 4).	Understandi ng	+ + +	+ + +	+ + +	+ + +	+ + +	++	+ + +	+ + +	++	+	+ + +	+ + +	+ + +	+ + +	+ + +	+ + +	+++++	+ + +	+ + +	+ + +	+ +	++++++	+ + +	+ + +	+ + +	+ + +	+ + +	+	+ + +	+	+
Single out the leading clinical symptom or syndrome (according to list 1). Make the most reliable or syndrome diagnosis of the disease (according to list 2). Assign laboratory and/or instrumental examination of the patient (according to list 4). Carry out differential diagnosis of diseases (according to list 2). Make an initial clinical diagnosis (according to list 2).	Synthesis	+ + +	+ + +	+ + +	+ + +	+ + +	+	+ + +	+ + +	+ +	+	+ + +	+ + +	+ + +	+	+	+	+ + +	+ + +	+ +	+ +	+ +	+ + +	+	+	++++	+++++	+ + +	+ +	+	+	+
Determine the necessary mode of work and rest in the treatment of the disease (according to list 2).	Application of knowledge	+ +	+ + +	+ +	+ + +	+ +	+	+ +	+ +	+ +	+	+ + +	+	+	+ + +	+	+ + +	+	+	-	-	-	+	+ + +	+ +	+ + +	+ + +	+ + +	+	+ +	++	+
Determine the necessary therapeutic nutrition in the treatment of the disease (according to list 2).	Application of knowledge	+ +	+ + +	+ +	+ + +	+ +	+	+ +	+ +	+ +	+	+ + +	+ +	+	+	+++++	+ + +	-	-	-	-	-	+ + +	+ + +	+ + +	+ + +	+ +	+ +	+	+ +	+++	+
Determine the principles and nature of treatment (conservative, surgical) of the disease (according to list 2).	Application of knowledge	+ + +	+ + +	+ + +	+ + +	+ + +	+	+ + +	+ + +	+ +	+	+ +	+ + +	+	+ + +	+ + +	+ + +	+	+ + +	+ + +	+ + +	+ + +	+ + +	+	+ + +	+ + +	+ + +	+ +	+	+	+ + +	+ +

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Make diagnosis (according to list 3).	Synthesis	+++	+++	+++	++	+++	+	++	++	++	+	++	++	+	+	+	+	++	++	++	++	++	++	+	++	++	+	++	+	++	+	-
	Synthesis	+	+	+	+	+			+	т		+	+	+				+	+	Т	+	т	+		т	Т	т	+		+		
Determine the tactics of emergency medical care based on the diagnosis of an emergency condition (according to list 3).	Application of knowledge	+ + +	+++++	+++++	++++	+++++	+	+ + +	+ + +	++	+	+ + +	+ + +	+ + +	-	-	+ + +	+ + +	+ + +	++++	+ + +	+ + +	+ + +	+	+ +	+	+	+ + +	-	÷	+	+ +
Provide emergency medical care on the basis of the diagnosis of an emergency condition (according to list 3).	Application of knowledge	+ + +	++++++	+++++	+ + +	+++++	+	+ + +	+ + +	+ +	+	+ + +	+ + +	+ + +	-	-	+ + +	+ + +	+ + +	+++++	+ + +	+ + +	+ + +	-	-	-	-	+ + +	-	+	+ + +	+ +
Organize medical and evacuation measures among the population and military personnel, taking into account the existing system of medical and evacuation support.	Application of knowledge	++	+ +	++	+ + +	+ + +	+	+ +	+ + +	+ +	+	+ + +	+	+	+ +	+	+ +	+ + +	+ + +	+ + +	+ + +	+++	+ +	+ + +	+ + +	-	-	+++++	+ + +	+ + +	+ + +	+ + +
Determine the tactics of conducting physiological deliveries and postnatal period.	Application of knowledge	+ + +	++++++	+ + +	+++++	+ + +	+	+ + + +	+ + +	++	+	+ + +	+ + +	+ + +	+ + +	+ + +	+ + +	+ + +	+ + +	+ + +	+ +	+ + +	+ + +	+++++	+ +	+ + +	+++++	+ + +	+ + +	+ + +	+ + +	+ + +
Form among the fixed contingent of the population dispensary groups of patients; groups of healthy people who are subject to dispensary supervision. Implement a system of anti-epidemic and preventive measures in the framework of primary health care. Implement a system of primary prevention measures within the framework of primary health care. Organize secondary and tertiary prevention activities among the assigned	Application of knowledge	+ +	+ + +	+ + +	+ + +	+ +	+	+ + +	+ +	+ + +	+ + +	+ + +	+ + +	+	+ + +	+ + +	++++	+	+	-	+ +	-	+ + +	+ + +	+ + +	+ + +	+ + +	+ + +	+ + +	+ + +	+ + +	+++++

		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
population.																																
Plan activities to prevent the spread of infectious diseases (according to list 2). Detect and make early diagnostics of infectious diseases (according to list 2); take primary anti- epidemic measures in the focus of infectious disease. Identify risk groups, risk areas, time of risk, risk factors and carry out epidemiological analysis of infectious diseases of the population.	Analysis	+++++	+ + +	+++++	+++++	+++	+	+++++	+++++	+ + +	+ + +	+ + +	+ + +	+ + +	+ +	+++	+ +	+	+	-	+ + +	-	+ + +	+++++	+++++	+++++	++++++	+ + +	+++++	+ + +	+++++	++++
Determine the tactics of examination and secondary prevention of patients subject to dispensary observation; tactics of examination and primary prevention of healthy individuals subject to dispensary observation; calculate and prescribe the necessary food for children of the first year of life.	Analysis	+++++	++++++	+++++	++	+++	+	+ + +	+ + +	+ + +	+ + +	+ + +	+ + +	+ +	+ + +	+ + +	+ + +	-	-	-	-	-	+ + +	++++++	+	++++++	+ + +	+ + +	+ + +	+ + +	+++++	++++
Determine the presence and degree of restrictions of life, type, degree and duration of disability with the registration of the relevant documents.	Analysis	++++++	+ + +	++	++	++	+	++	+ + +	+++	+	+ + +	+ + +	++	+++++	+ + +	++++++	+ + +	+	-	-	-	+ + +	+ + +	+ + +	+ + +	+ + +	+ + +	+ + +	++	+ + +	+ + +
Prepare an annual report on personal production activities; maintain medical records of the patient and the population.	Synthesis	+ +	+	+	+ +	+ +	+ +	+ +	+ + +	+	-	+ +	+ +	+ +	+ + +	+ + +	+ +	+	+ + +	+ +	+ + +	-	+ + +	+ + +	+ + +	+ + +	+ + +	+ + +	+ + +	+ + +	+ + +	+ + +
Conduct screening to identify the most important	Assessment	+++	++	+++	+++	++	+	++	++	+ +	+ +	+ +	+ +	+	+	+	++	+ +	++	-	+ +	-	+ +	+ +	++	++	++	++	+ +	+ +	+ +	+ +

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noncommunicable diseases; assess morbidity rates, integrated health indices; identify risk factors for the occurrence and course of diseases; form risk groups of the population. Determine the source and/or location of the required information depending on its type; extract the necessary information from a specific source; process and analyze the information received.		+	+	+	+			+		+	+	+	+								+		+	+	+	+		+	+	+	+	+
Determine the negative factors of the environment; analyze the state of health of a certain contingent; determine the existence of a connection between the state of the environment and the state of health of a certain contingent; develop preventive measures on the basis of data on the relationship between the state of the environment and the state of health of a certain contingent. Carry out the analysis of morbidity of the population, identifying risk groups, risk areas, time of risk, risk factors. Assess the impact of socio-economic and biological determinants on the health of the individual, family and population.	Analysis	+ + +	+ + +	+ + +	+ + +	+ +	+	+ + +	+ +	+ + +	+ + +	+ + +	+ + +	+ + +	+ +	+ +	+	+	-	-	+ +	-	+ + +	+ + +	+ + +	+ + +	+ +	+ + +	+ + +	+ + +	+ + +	+++++
Investigate the volume and effectiveness	Assessment	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	•	+	+	+	+	+	+	+	+	+	+

		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
of activity of the doctor, department, health care institutions; identify defects in the activities and causes of their development. Carry out selection and use the unified clinical protocols on providing medical care developed on the principles of evidence-based medicine; develop and use local protocols of providing medical care. Control the quality of medical care; identify factors that prevent the improvement of the quality and safety of medical care. Estimate the cost of medical services; justify 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 in the selection of methods of diagnosis, prevention, treatment, rehabilitation.		+	+	+	+	+ +	+	+ +	+ +	+	+		+		+ +	+ +	+ +	+ +	+ +	+ +	+ +		+ +	+ +	+ +	+ +	+ +	+ +	+ +	+ +	+ +	+ +
Organize the work of medical personnel; create rational medical routes of patients; organize interaction with colleagues, organizations and institutions; apply measures to promote medical services.	Application of knowledge	++	++	+ +	++	+ + +	+ +	++	++	+ + +	+ +	+ +	++	+	++	++	+	++	+ + +	+ + +	+ + +	++	+ + +	+ + +	+ + +	+ + +	+ + +	+ + +	+ + +	+ + +	+++++	+ + +
											Em	otiona	al (affe	ective) sphe	re																
Formulate objectives and determine the structure of personal	Value orientation	++	++	++	+ +	++	+	++	+ +	+ +	+ +	+ +	++	+ +	+ +	+ +	+ +	+ +	++	+ +	++	+ +	+ +	+ +	+ +	++	+ +	+ +	+ +	+ +	++	+ +

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activity.		+	+						+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Adhere to a healthy lifestyle, use self- regulation and self- control techniques	Organizatio n and conceptuali zation	+ + +	+ + +	+ +	+	+	+	+	+ + +	+ + +	+	-	-	-	-	-	-	-	-	-	-	-	-	+ +	+ +	-	-	-	+ +	+ +	+ +	+
Realize and be guided in the activity by the civil rights, freedoms and duties, enhance the general-educational cultural level.	Value orientation	+ + +	+ + +	+ +	+	+	+ + +	+ +	+ + +	+ + +	++	+	-	-	+	+	+	++	+ +	+ +	+	-	+ +	+ +	+ +	+ +	+ +	++	+	+	+	+
Comply with the requirements of ethics, bioethics and deontology in the professional activities.	Organizatio n and conceptuali zation	+ + +	+ + +	+ + +	+	+ + +	+ +	+ +	+ + +	+ + +	+	+ + +	+	+	+	+	+ +	+	+	+	+	+ +	+ +	+ +	+ +	+ +	+ +	+	+	+	+	+ +
Provide the necessary level of individual safety (own and persons who are taken care of) in the event of typical dangerous situations in the individual field of activity.	Organizatio n and conceptuali zation	++	+ + +	+ + +	+ + +	++	+	+	+ + +	+ + +	++	+ + +	++	+	-	-	-	++	+ +	+ +	++	+	+	+	+	+	-	-	-	+	+	+
											ł	Psych	omot	or sp	here																	
Perform medical manipulations (according to list 5).	Manipulation	+ +	+ + +	+ + +	++++++	++++++	+	+ +	+ + +	+ +	-	+ + +	+ + +	+ + +	-	-	+ + +	+ + +	+ + +	+ + +	+	+ + +	+ + +	+	-	+ +	-	+ + +	+	-	+ +	+

Note: the number of "+" signs reflects the influence of the component on the formation of the curriculum training outcome.

"+++" - this component dominates in the curriculum

"++" - this component is sufficient in the curriculum

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

"- " - this component is not learned in the learning process

4. REQUIREMENTS FOR PREVIOUS LEVEL OF EDUCATION OF COMPETITORS

A person has the right to obtain a Master's degree on the basis of complete general secondary education, subject to the successful completion of external independent assessment of the quality education (at least 150 points in the second and third competitive items).

A person has the right to obtain a Master's degree on the basis of the educational qualification level of a junior specialist, acquired on the specialty 5.12010101 Medical Case or 5.12010102 Nursing, subject to successful passing of entrance examinations.

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

The volume of educational-professional program is 360 ECTS credits ECTS. The normative part of the program is 356 ECTS credits. The volume of the sample is 4 ECTS credits. Taking into account the specifics of the branch and professional activities of professional qualifications "Doctor", the implementation of paragraph 15 of Article 62 of the Law of Ukraine "On Higher Education" in full volume is impossible.

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

The competencies that a competitor should master	Program learning outcomes	Name of the discipline, practice
	Normative conte	
		nomic, natural sciences) training
CC ₆	GR_6	Foreign language
CC ₉	GR ₉	History of Ukraine and Ukrainian culture
CC ₁	GR_1	Philosophy
CC ₆	GR_6	Professional Ukrainian in use
SC ₁₇	SR_{17}	The Latin language and the fundamentals of medical terminology
CC ₃	GR ₃	The History of medicine
SC ₁₉	SR ₁₉	Medical biology
SC ₂	SR_2	Medical and Biological physics
CC ₇ , SC ₁₈	GR ₇ , SR _{18.2}	Medical computer science
SC ₂	SR_2	Medical chemistry
SC ₂ , SC ₃	SR ₂ , SR _{3.1} , SR _{3.2}	Bioorganic and biological chemistry
SC ₁ , SC ₃	SR1, SR3.1, SR3.2	Human Anatomy
SC ₂ , SC ₃	SR ₂ , SR _{3.1} , SR _{3.2}	Histology, Cytology and Embryology
SC ₁ , SC ₂ , SC ₃	$SR_{1}, SR_{2}, SR_{3.1}, SR_{3.2}$	Physiology
SC ₁₃ , SC ₁₄ , SC ₁₉	SR _{13,2} ,SR ₁₄ , SR _{19,3}	Microbiology, Virology and Immunology
II. Cycle for professional	training	
SC_{19}	SR _{19.1}	Life Safety: the basis of bioethics and biosecurity
SC ₂ , SC ₃ , SC ₁₉	SR ₂ , SR _{3.1} , SR _{3.2} , SR _{19,3}	Pathological morphology
SC ₂ , SC ₃ , SC ₁₉	SR ₂ , SR _{3.1} , SR _{3.2} , SR _{19,3}	Pathological physiology
SC ₆	SR_6	Pharmacology
CC _{10,} SC ₁₃	GR_{10} , $SR_{13.2}$, $SR_{13.3}$	Hygiene and Ecology
SC_{1} , SC_{3}	$SR_{1,}SR_{3.1,}SR_{3.2}$	Propaedeutics of internal medicine
SC _{1,} SC ₃	$SR_{1,}SR_{3.1,}SR_{3.2}$	Propaedeutics of pediatrics

DISTRIBUTION OF TRAINING RESULTS FOR EDUCATIONAL ACTIVITIES

SC_1 , SC_3	SR ₁ , SR _{3.1} , SR _{3.2}	General surgery
SC1, SC5, SC ₁₁	SR ₁ , SR ₅ , SR ₁₁	Care for the sick (practice)
$\frac{\operatorname{SC}_{1},\operatorname{SC}_{5},\operatorname{SC}_{11}}{\operatorname{SC}_{3},\operatorname{SC}_{5},\operatorname{SC}_{11}}$	$\frac{SR_{1}, SR_{5}, SR_{11}}{SR_{3}, SR_{5}, SR_{11}}$	Nurses practice
		Radiology
SC ₃	SR _{3.1} , SR _{3.2}	Internal medicine
SC ₂ , SC ₃ SC4, SC11,	SR ₂ , SR _{3.1} , SR _{3.2} , SR4,	
SC15, SC20	SR11, SR15, SC20.2	
$SC_2, SC_3, SC4, SC_{11},$	SR ₂ , SR _{3.1} , SR _{3.2} , SR ₄ ,	Pediatrics
SC15, SC20	SR11, SR15, SC20.2	
SC ₂ , SC ₃ , SR4, SC ₁₁ ,	SR ₂ , SR _{3.1} , SR _{3.2} , SR4, SR11, SR15, SC20.2	Surgery
SC15, SC20		Obstetrics and Gynecology
SC ₂ , SC ₃ , SC ₁₁ , SC ₁₂ ,	SR ₂ , SR _{3.1} , SR _{3.2} , SR ₁₁ ,	obsteriles and Oynecology
SC15, SC20	SR12.1, SR12.2, SR15, SC20.2	
SC13, SC15, SC16,	SR 13.4, SR15, SR16,	Social medicine, public health
SC17, SC18, SC19,	SR17, SR18.1, SC19.1,	Social medicine, public neural
SC20, SC21	SC19.2, SR20.1,	
~~~~~~~~~	SR20.3, SR21.1, SR21.2	
SC ₂ , SC ₃ , SC ₁₁	SR ₂ , SR _{3.1} , SR _{3.2} , SR ₁₁	Urology
SC ₂ , SC ₃ , SC ₁₁	SR ₂ , SR _{3.1} , SR _{3.2} , SR ₁₁	Otorhinolaryngology
SC ₂ , SC ₃ , SC ₁₁	SR ₂ , SR _{3.1} , SR _{3.2} , SR ₁₁	Ophthalmology
SC ₂ , SC ₃ , SC ₁₁	SR2, SR3.1, SR3.2, SR11	Neurology
SC ₂ , SC ₃ , SC ₁₅ SC ₂ , SC ₃ , SC ₁₅	SR ₂ , SR _{3.1} , SR _{3.2} , SR ₁₅	Medical psychology
SC ₂ , SC ₃ , SC ₁₅ SC ₂ , SC ₃ , SC ₁₅	SR2, SR3.1, SR3.2, SR15 SR2, SR3.1, SR3.2, SR15	Psychiatry, Narcology
SC ₂ , SC ₃ , SC ₁₃	SR ₂ , SR _{3.1} , SR _{3.2} , SR ₁₅ SR ₂ , SR _{3.1} , SR _{3.2} , SR ₁₁	Dermatology, Venereology
SC ₄ , SC ₁₃	SR ₄ , SC _{13.4}	Physical rehabilitation, sports medicine
SC16,SC21, CC ₈	SR16, GR ₈ , SC21.1	Forensic medicine. Medical law of Ukraine
$SC_{10}, SC_{21}, SC_{32}, SC_{11}, SC_{12}, SC_{13}, SC_{11}, SC_{12}, SC_{13}, SC_{11}, SC_{12}, S$	SR1, SR2,SR3.1, SR3.2,	Medical practical training
CC2	SR1, SR2, SR3.1, SR3.2, SR11, GR2	needen proceed training
SC ₂ , SC ₃ , SC ₁₄ , SC ₂₀	SR ₂ , SR ₃ , SR _{14.1} , SR _{14.2}	Infectious diseases
2, 3, 1, 2020	SC _{20.2}	
SC13, SC14, SC18, SC19	SR13.1, SR13.2,	Epidemiology and principles of evidence-based
	SR13.3, SR14.2,	medicine
	SR14.3, SR18.1, SC19.3	
$SC4, CC_9$	SR4, GR ₉	Palliative and Hospice Medicine
SC ₂ , SC ₃ , SC ₁₁ , SC ₁₅	SR ₂ , SR _{3.1} , SR _{3.2} , SR ₁₁ ,	Oncology and Radioactive Medicine
	SR15	
SC ₂ , SC ₃ , SC ₁₁	SR ₂ , SR _{3.1} , SR _{3.2} , SR ₁₁	Traumatology and orthopedics
SC ₂ , SC ₃ , SC4, SC ₁₁ ,	SR ₂ , SR _{3.1} , SR _{3.2} , SC4,	Phthysiology
SC20	SR11, SC20.2	
SC ₂ , SC ₃ , SC ₇ , SC ₈ ,	SR ₂ ,SR _{3.1} , SR _{3.2} , SR ₇ ,	Anesthesiology and intensive care
SC9, SC11, SC20	SR8, SR9, SR11, SC20.2	
SC7, SC8, SC9, SC20,	SR7, SR8, SR9 SC20.2,	First aid and emergency medical care
CC ₄	GR ₄	
SC ₃ , SC4, SC11, SC15,	SR _{3.1} , SR _{3.2} , SR4,	General Practice (Family Medicine)
SC21	SR11, SR15, SR21	•
SC ₁ , SC ₁ 1	SC ₁ , SR11	Clinical anatomy and operative surgery
SC4, SC10, SC14, CC ₄	SR4, SR10, SR14.1,	Training of reserve officers in the field of
	SR14.2, GR ₄	knowledge "Health". Specialty "Medicine"
SC14, SC19, SC21,CC ₅	SR14.3, SC19.1, SC19.2,	Occupational Health in medicine
	SC21.1, GR ₅	

Variation training cycle						
$CC_{1}$ , $CC_{2}$ , $CC_{3}$ , $CC_{4}$ , $CC_{5}$ ,	$GR_{1}$ , $GR_{2}$ , $GR_{3}$ , $GR_{4}$ , $GR_{5}$ ,					
$CC_{6}$ , $CC_{7}$ , $CC_{8}$ , $CC_{9}$ , $CC_{10}$ ,	$GR_6, GR_7, GR_8, GR_9$	Courses by choice (listed in the appendix)				
$SC_{6}, SC_{7}, SC_{8}$	$\mathrm{GR}_{10},\mathrm{SR}_{6},\mathrm{SR}_{7},\mathrm{SR}_{8}$					

### **VOLUME PROGRAM DISTRIBUTION FOR EDUCATIONAL ACTIVITIES**

N⁰	Kind of educational activity	Volume of loans ESTS	Volume, hours	
I. N	ORMATIVE PART	339	10170	
	Humanitarian and socio-economic training			
1.	Ukrainian Language	23	690	
2.	History of Ukraine and Ukrainian culture	3	90	
3.	Philosophy	3	90	
	Total	29	870	
	Natural and scientific training			
4.	Professional English in use	6	180	
5.	The Latin language and fundamentals of medical terminology	3	90	
6.	History of medicine	3	90	
7.	Medical biology	5,5	165	
8.	Medical and biological physics	4	120	
9.	Medical computer science	3,5	105	
10.	Medical chemistry	4	120	
11.	Bioorganic and biological chemistry	9,5	285	
12.	Human Anatomy	14,5	435	
13.	Histology, Cytology and Embryology	11,5	345	
14.	Physiology	10	300	
15.	Microbiology, virology and embryology	8,5	255	
	Total	83	2490	
	Professional training			
16.	Life Safety; the basis of bioethics and biosecurity	3	90	
17.	Pathomorphology	7	210	
18.	Pathophysiology	7	210	
19.	Pharmacology	7	210	
20.	Hygiene and ecology	9	270	
21.	Propaedeutics of the internal medicine	6	180	
22.	Propaedeutics of pediatrics	5	150	
23.	General surgery	6	180	
24.	Care for the sick (practice)	5	150	
25.	Nursing practice	3	90	
26.	Radiology	4	120	
27.	Internal medicine	32,5	975	
28.	Pediatrics	20	600	
29.	Surgery	22	660	
30.	Obstetrics and Gynecology	11,5	345	
31.	Social medicine, public health	9	270	
32.	Urology	3	90	

33.	Otorhinolaryngology	3	90
34.	Ophthalmology	3	90
35.	Neurology	4	120
36.	Medical psychology	3	90
37.	Psychiatry, narcology	3	90
38.	Dermatology, Venereology	3	90
39.	Physical rehabilitation, sports medicine	3	90
40.	Forensic Medicine. Medical law of Ukraine	3	90
41.	Medical practical training	10	300
42.	Infectious diseases	6,5	195
43.	Epidemiology and principles of evidence-based medicine	3	90
44.	Palliative and Hospice Medicine	3	90
45.	Oncology and Radiation Medicine	4	120
46.	Traumatology and orthopedics	3	90
47.	Phthysiology	3	90
48.	Anesthesiology and intensive care	3	90
49.	First aid and emergency medical care	3	90
50.	General Practice (Family Medicine)	4,5	135
51.	Clinical anatomy and operative surgery	3	90
52.	Training of reserve officers in the field of knowledge "Health". Specialty "Medicine"	10	300
53.	Occupational Health in Medicine	3	90
	Total	244	7320
		-	120
II	VARIATIVE PART	4	<b>120</b>
	Courses of choice	4	120
III	Physical Education training	0	320
IV	Attestation	0	60
	TOTAL PROGRAM	360	11180

#### 5. REQUIREMENTS FOR THE STRUCTURE OF DISCIPLINES AND PRACTICES

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

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

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

#### 6. FORMS OF ATTESTATION OF HIGHER EDUCATION TRAINERS

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

- integrated test examination "STEP";
- objective structured practical (clinical) exam;
- international exam on the basics of medicine;
- Professional English exam.

Stages and Compulsory Components of a Unified State Qualification Exam:

The first stage	The second stage				
(third year of study)	(in the sixth year of study)				
- STEP 1;	- STEP 2;				
<ul> <li>international exam on the basics of medicine (fundamental disciplines);</li> <li>English language professional guidance.</li> </ul>	<ul> <li>international exam on the basics of medicine (clinical discipline);</li> <li>practical (clinical) exam</li> </ul>				

#### 7. TERMS OF TRAINING

Preparation is carried out only in full-time (full-time) form of study The term of study is 6 years.

#### 8. STRUCTURAL-LOGICAL SCHEME

			Distribution				the		
N⁰	Name of the discipline	COL	courses						
		1	2	3	4	5	6		
1.	Ukrainian language	*	*	*	*	*			
2.	History of Ukraine and Ukrainian culture	*							
3.	Philosophy	*							
4.	Foreign language (for professional purposes)		*						
5.	Latin language and medical terminology	*							
6.	The history of medicine	*							
7.	Medical biology	*							
8.	Medical and biological physics	*							
9.	Medical informatics		*						
10.	Medical chemistry	*							
11.	Biological and biogranic chemistry	*	*						
12.	Human Anatomy	*	*						
13.	Histology, cytology and embryology	*	*						
14.	Physiology		*						
15.	Microbiology, Virology and Immunology		*	*					
16.	Life Safety; the basis of bioethics and biosecurity	*							

17.	Pathomorphology			*			
18.	Pathophysiology			*			
19.	Pharmacology			*			
20.	Hygiene and ecology		*	*			*
21.	Propaedeutics of internal medicine			*			
22.	Propaedeutics of pediatrics			*			
23.	General surgery			*			
24.	Care for the sick (practice)		*				
25.	Nursing practice			*			
26.	Radiology			*			
27.	Internal Medicine				*	*	*
28.	Pediatrics				*	*	*
29.	Surgery				*	*	*
30.	Obstetrics and gynecology				*	*	*
31.	Social medicine, public health			*	*		*
32.	Urology				*		
33.	Otorhinolaryngology				*		
34.	Ophthalmology				*		
35.	Neurology				*		
36.	Medical psychology			*			
37.	Psychiatry, narcology				*		
38.	Dermatology, venereology				*		
39.	Physical rehabilitation, sports medicine				*		
40.	Forensic Medicine. Medical law of Ukraine				*		
41.	Industrial medical practice				*	*	
42.	Infectious diseases					*	*
43.	Epidemiology and principles of evidence-based medicine					*	
44.	Palliative and Hospice Medicine						*
45.	Oncology and Radiation Medicine					*	
46.	Traumatology and orthopedics					*	
47.	Phthysiology					*	
48.	Anesthesiology and intensive care					*	
49.	Emergency medical care					*	
50.	General Practice (Family Medicine)						*
51.	Clinical anatomy and operative surgery		*				
52.	Preparation of officers for the reserve of the field of		*		*	*	
	knowledge "Health". Speciality "Medicine"						
53.	Occupational Health in the field		*				
	Courses by choice						*
	Physical training	*	*				
	Attestation			*			*

### 9. REQUIREMENTS FOR THE EXISTENCE OF THE INTERNAL SECURITY SYSTEM OF HIGHER EDUCATION

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

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

2) monitoring and periodic review of educational programs;

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

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

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

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

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

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

9) other procedures and measures.

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

#### **10. FINAL PROVISIONS**

The educational-professional program is put into effect from 01.09.2019 in accordance with the decision of the academic council of the State Higher Educational Institution of Ukraine "Bukovinsky State Medical University" (Minutes No. 9 dated May 23, 2019), is made available on the University's website prior to admission to training in accordance with Rules of admission. Changes to the educational-professional program are introduced by the heads of the departments to the Central Methodical Commission, which examines them and presents them at the Academic Council of the University. After approval by the academic council, the order of the rector changes are introduced to the educational-professional program of training specialists.

#### List 1 (Syndromes and Symptoms)

- 1. amenorrhea
- 2. anemic syndrome
- 3. Anuria and Oliguria
- 4. arterial hypertension
- 5. arterial hypotension
- 6. Pain in the chest
- 7. abdominal pain
- 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 hepatolian syndrome
- 20. headache
- 21. Dysuria
- 22. dysmenorrhea
- 23. dyspepsia
- 24. dysphagia
- 25. diarrhea
- 26. jaundice
- 27. shortness of breath
- 28. asphyxia
- 29. fasten

- 30. dizziness
- 31. cardiomegaly
- 32th cough
- 33. intestinal obstruction
- 34. hemoptysis
- 35. lymphadenopathy
- 36. Meningeal syndrome
- 37. uterine bleeding
- 38. edema syndrome
- 39. paresis, paralysis
- 40. Polyuria
- 41. portal hypertension
- 42. abnormal speech (aphasia)
- 43. disturbances of cardiac rhythm and conduction
- 44. Disorders of consciousness
- 45. itchy skin
- 46. Urinary tract syndrome
- 47. dementia syndrome
- 48. Dehydration syndrome
- 49. Digestive insufficiency syndrome
- 50. Stridor
- 51. articular syndrome
- 52. Cramps
- 53. weight loss
- 54. cyanosis
- 55. partial or complete loss of vision
- 56. partial or complete loss of hearing
- 57. Gastrointestinal bleeding

#### List 2 (diseases)

# I) Bblood disorders and haemopoietic organs, with impaired immune mechanism

- 1. Anaemias
- 2. hemolytic disease of the newborn
- 3. hemophilia
- 4. leukaemias
- 5. lymphomas
- 6. inherited (Bruton disease, Wiskott-Aldrich syndrome) and acquired immunodeficiencies
- 7. neonatal sepsis
- 8. surgical sepsis
- 9. idiopathic thrombocytopenic purpura
- 10. chronic radial injuries

#### II) Mental and behavioural disorders:

- 11. bipolar affective disorders
- 12. acute psychosis i.e. alcoholic delirium
- 13. epilepsy
- 14. neurotic disorders
- 15. personality disorders
- 16. schizophrenia

#### III) Nervous system diseases

- 17. intracranial injures
- 18. meningitis, encephalitis
- 19. migraine and migraine types
- 20. perinatal encephalopathy
- 21. disorders of the autonomic nervous system
- 22. cerebral bloodflow disorders
- 23. vertebrogenic disorders of the nervous system, neuropathies, and polynephropathies
- 24. encephalomyelitis disseminata
- 25. chronic professional injuries (hand-arm vibration syndrome, professional dyskinesias) *Eye diseases*
- 26. blepharitis
- 27. acute glaucoma attack
- 28. conjunctivitis
- 29. a foreign object in the eye
- 30. eye injures
- 31. retinopathies
  - Otolaryngologic Diseases
- 32. Laryngitis
- 33. Otitis

- 34. peritonsillar abscess
- 35. sinusitis
- 36. tonsilitis

#### IV) Cardio-vascular diseases:

- 37. aortic aneurism
- 38. atherosclerosis
- 39. varicose veins of lower extremities
- 40. congenital heart defects
- 41. secondary arterial hypertension
- 42. acute occlusion of magistral and peripheral arteries;
- 43. endocarditis
- 44. essential and secondary arterial hypertension
- 45. ischemic heart disease
- 46. carditis
- 47. cardiomyopathies
- 48. cor pulmonale (pulmonary heart disease)
- 49. acquired cardial defect
- 50. obliteral endarteritis (endocarditis obliterans)
- 51. pericarditis
- 52. disorders of cardiac rhythm and conduction
- 53. heart failure
- 54. heart and blood vessels injuries
- 55. tromboembolia of pulmonary artery
- 56. phlebitis, trombophlebitis

# V) Respiratory system diseases and mediastinum:

- 57. asphyxia
- 58. bronchial asthma
- 59. bronchitis
- 60. bronchiectatic disease (bronchiectasis)
- 61. bronchopulmonary dysplasia
- 62. congenital developmental defects of the respiratory system
- 63. respiratory failure
- 64. infectious-destructive lung disease
- 65. lung failure
- 66. mediastinitis
- 67. mucoviscidosis
- 68. lung and mediastinum neoplasm
- 69. pleuritis
- 70. pneumoconiosis

- 71. pneumonias
- 72. pneumothorax
- 73. respiratory distress syndrome and neonatal pneumonia
- 74. foreign body in respiratory tract
- 75. chest injuries (superficial and open)
- 76. chronic obstructive pulmonary disease

#### VI) Diseases of the digestive system:

- 77. rectal prolapse
- 78. ulcer disease
- 79. congenital developmental defects of the digestive system
- 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 esophageal diseases
- 87. enteritis, colitis
- 88. inflammative diseases of the rectum and perianal region
- 89. strangulated and non-strangualed hernias of the abdomen
- 90. neoplasms of the esophagus, stomach, large intestine, liver and pancreas
- 91. peptic and duodenal ulcers
- 92. peritonitis
- 93. perforation of a hollow organ
- 94. liver failure
- 95. malabsorption syndrome
- 96. pyloris stenosis
- 97. abdominal injuries (superficial and open)
- 98. functional gastroduodenal disorders
- 99. diseases of an operated on stomach cholecystitis, cholangitis, gallstone disease, cholelithiasis, liver cirrhosis
- 100. gastrointestinal bleeding

#### VII) Disorders of the urogenital system:

- 101. renal amyloidosis
- 102. balanitis, balanoposthitis
- 103. congenital malformations of the urinary system
- 104. glomerulonephritis

- 105. dysmetabolic nephropathy
- 106. nephrotic syndrome
- 107. neoplasms of the kidney, urinary tract and prostate gland
- 108. pyelonephritis
- 109. prostatitis
- 110. urinary stone disease
- 111. tubulointerstitial nephritis
- 112. urethritis
- 113. chronic kidney disease
- 114. cystitis

# VIII) Diseases of the skin and subcutaneous tissue :

- 115. allergic dermatitis ( dermatitis, toxidermia, eczema)
- 116. bacterial diseases of the skin and subcutaneous tissue, pyodermia
- 117. purulent inflammatory diseases of the fingers and hands
- 118. purulent inflammatory diseases in children and newborns
- 119. mycosis
- 120. burns and congelation
- 121. parasitic skin diseases ( scabies, pediculosis)
- 122. psoriasis
- 123. vesicular dermatitis
- 124. specific surgical infection (anaerobic clostridial and non clostridial)

# IX) Diseases of the musculoskeletal system and connective tissues:

- 125. ankylosing spondylitis
- 126. congenital and acquired developmental defects of the musculoskeletal system
- 127. acute rheumatic fever
- 128. dermatomyositis and polymyositis
- 129. neoplasms of the musculoskeletal system
- 130. osteoarthritis
- 131. osteomyelitis
- 132. gout
- 133. polytrauma
- 134. reactive arthritis
- 135. rheumatoid arthritis

- 136. systemic scleroderma
- 137. systemic lupus erythematosus
- 138. systemic vasculitis (nodular polyarteritis, hemorrhagic vasculitis, hypersensitivity vasculitis)
- 139. typical fractures of the bones of the shoulder, forearm, hand, thigh, tibia, foot
- 140. pelvic injuries
- 141. spinal cord injuries
- 142. damage to large joints (hip, knee, tibia, elbow)
- 143. chronic rheumatic diseases
- 144. juvenile rheumatoid arthritis

# X) Endocrine diseases, nutritional and metabolic disorders:

- 145. Acromegaly
- 146. thymic hyperplasia
- 147. hypothyreosis
- 148. hypotrophy, protein-energy insufficiency
- 149. pituitary dwarfism
- 150. diffuse toxic goiter
- 151. iodine deficiency disorders of the thyroid gland
- 152. diabetes insipidus
- 153. thyroid neoplasms
- 154. obesity
- 155. congenital dysfunction of the adrenal cortex
  - 156. rickets, spasmophilia,
  - 157. hereditary diseases of metabolism (phenylketonuria))
  - hereditary chromosomal disorders (Down's syndrome, Shereshevsky-Turner syndrome
  - 159. thyroiditis
  - 160. thyrotoxicosis
  - 161. Ichenko-Cushing disease and syndrome
  - 162. chronic adrenal insufficiency
  - 163. diabetes mellitus

#### XI) Infectious and parasitic diseases:

- 164. bacterial food poisoning
- 165. erysipelas
- 166. botulism
- 167. viral hepatitis

- 168. chicken pox
- 169. congenital infections of the newborn
- 170. helminthiasis
- 171. herpesvirus infections
- 172. influenza and other acute respiratory viral infections
- 173. diphtheria
- 174. infectious mononucleosis
- 175. candidiasis
- 176. pertussis
- 177. bacterial intestinal infections
- 178. intestinal viral infections
- 179. measles
- 180. tick-borne viral encephalitis
- 181. German measles
- 182. leptospirosis
- 183. malaria
- 184. meningococcal infection
- 185. especially dangerous viral infections
- 186. parotid infection
- 187. poliomyelitis
- 188. Tetanus
- 189. Protozoal Infections
- 190. Rickettsiosis
- 191. Anthrax
- 192. Rabies
- 193. scarlet fever
- 194. Tuberculosis of the local area
- 195. Lyme's disease
- 196. illness caused by Human Immunodeficiency Virus (HIV)
- 197. Chlamydia infections
- 198. Cholera
- 199. plague

## - infectious diseases transmitted mainly by sexual contact:

- 200. Gonococcal infection
- 201. syphilis

#### XII)

#### Diseases of the female reproductive system Pregnancy Pathology:

- 202. multiple pregnancy
- 203. Vomiting of pregnant women
- 204. pregnancy with extragenital pathology
- 205. Distress in the fetus during pregnancy
- 206. Fetal growth retardation

- 207. Immune conflict during pregnancy
- 208. Swollen Fever
- 209. placenta previa
- 210. premature detachment of the placenta
- 211. premature birth and pregnancy
- 212. extrauterine gestation
- 213. preeclampsia and eclampsia
- 214. spontaneous abortion

#### Pathology of childbirth and postpartum period:

- 215. abnormalities of labor activity
- 216. pelvic anomalies, including clinically narrow pelvis
- 217. Distress of the fetus during labor
- 218. bleeding of labor and postpartum
- 219. wrong position and fetal pregnancy
- 220. postpartum septic diseases
- 221. injuries of the uterus and labor paths

gynecological diseases:

- 222. abnormal uterine bleeding
- 223. applexia of the ovary
- 224. infertility
- 225. congenital malformation of female genital organs
- 226. benign dysplasia of the mammary glands
- 227. benign and precancerous tumors of female reproductive organs
- 228. Endometriosis
- 229. inflammatory diseases of female genital organs
- 230. Malignant neoplasms of female reproductive organs
- 231. mastitis
- 232. neuroendocrine syndromes
- 233. Breast tumors

#### List 3 (medical emergencies):

- 1. asphyxia (including neonatal)
- 2. hypertensive crisis
- 3. acute respiratory failure
- 4. acute urinary retention
- 5. adrenal crisis
- 6. acute kidney injury
- 7. acute liver failure
- 8. acute heart failure
- 9. acute poisoning, including chemical warfare agents
- 10. acute psychosis
- 11. acute coronary syndrome
- 12. acute radiation and chemical injury including battlefields and emergencies
- 13. acute cerebral insufficiency
- 14. electrical injury
- 15. status epilepticus
- 16. acute bleeding
- 17. acute blood loss syndrome including battlefields and emergencies
- 18. cardiac failure
- 19. collapse
- 20. impairment of consciousness and comatose condition
- 21. renal colic
- 22. gallstone colic
- 23. acute anaphylactic reactions
- 24. acute heart rhythm disorder
- 25. cold injury including battlefields
- 26. heat trauma including battlefields
- 27. convulsive disorder
- 28. drowning
- 29. strangulated asphyxia
- 30. easy delivery
- 31. collapses
- 32. bites of snakes, insects and animals
- 33. penetrating wounds including battlefields
- 34. burns including battlefields
- 35. foreign matters of respiratory passages, gastrointestinal tract, ENTorgans and eye

### List 4 (laboratory and instrumental studies)

- 1. analysis of the pleural fluid
- 2. ascitic fluid analysis
- 3. analysis of synovial fluid
- 4. urine analysis according to Zimnytsky
- 5. urine analysis according to Nechyporenko
- 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. peroral test for glucose tolerance
- 10. lipids and lipoproteins of blood and their fractions
- 11. hormones of blood
- 12. ferritin, iron and copper of blood serum
- 13. creatinine, urea blood and urine, the speed of glomerular filtration
- 14. electrolytes of blood
- 15. blood aminotransferase
- 16. total bilirubin of blood and its fractions
- 17. coagulogram
- 18. blood uric acid
- 19. alkaline phosphatase of blood
- 20. biopsy histomorphological study of the lymph nodes
- 21. biopsy histomorphological study of the parenchymal organs
- 22. biopsy histomorphological study of the mucous membranes
- 23. biopsy histomorphological study of muscle and skin
- 24. observatios of the internal environment of facilities (microclimate indicators, natural and artificial lighting, bacteriological and chemical pollution of air)
- 25. study of the function of external respiration
- 26. standard ECG (12 leads)

- 27. endoscopic examination of bronchi
- 28. endoscopic examination of the digestive tract
- 29. echocardiography and doppler sonography
- 30. complete feces analysis
- 31. complete blood cell count
- 32. clinical urine analysis
- 33. complete cerebrospinal fluid analysis
- 34. complete sternal puncture analysis
- 35. complete sputum examination
- 36. immunological profile of blood
- 37. serological reactions in infectious diseases
- 38. rapid tests for viral diseases
- 39. amplification methods in infectious diseases (PCR)
- 40. serological reactions in autoimmune diseases
- 41. chemical and bacteriological studies of the human environment (atmospheric air, basins, soil)
- 42. microbiological study of biological fluids and extracts
- 43. radiation measurements (sound, vibration, ionizing), individual radiometry
- 44. methods of instrumental visualization of thyroid gland
- 45. radiographic contrast angiography
- 46. methods of instrumental visualization of abdominal cavity organs
- 47. methods of instrumental visualization of the chest cavity
- 48. methods of instrumental visualization of the urinary system
- 49. methods of instrumental visualization of the skull, spine, spinal cord, bones and joints
- 50. methods of instrumental visualization of the thoracic gland
- 51. tuberculin diagnostics
- 52. multi-stage fractional study of bile and pH-meter of stomach and esophagus

- 53. chemical, organoleptic, bacteriological examination of food and drinking water
- 54. cytological examination of the cervix
- 55. measuring ergonomic indicators of complication and labor intensity

#### List 5 (medical manipulations):

- 1. perform an indirect heart massage
- 2. perform an artificial respiration
- perform a defibrillation with the help of a manual automatic defibrillator cardioverter
- 4. register the standard ECG in 12 leads
- 5. perform a temporal stop of external bleeding
- carry out a primary surgical treatment of the wound, dressing, removing stitches including battlefields
- 7. apply bandages including battlefields
- 8. insert a nasogastric and orogastric catheter
- 9. carry out a transport immobilization
- injection of medicinal substances (intravenous jet and drip, intraosseous), including battlefields
- 11. provide peripheral venous access
- 12. measure arterial pressure
- 13. restore airway patency
- 14. conduct a catheterization of the bladder with a soft probe
- 15. carry out a nasal tamponade
- 16. perform the technique of contact of a newborn "skin to the skin" and first touch to the chest
- 17. perform a digital rectal examination with the help of a rectal speculum
- 18. perform a prostate gland finger test
- 19. carry out a clinical examination of the mammary glands
- 20. do a pleural puncture procedure
- 21. determine the blood group, Rh-affiliation
- 22. transfusions of blood components and blood substitutes

- 23. perform a bimanual examination and gynecological examination of a woman
- 24. conduct a pelvimetry
- 25. perform external (Leopold's maneuvers) and internal obstetric examination
- 26. perform an auscultation of the fetus
- 27. taking smears for bacterioscopy, bacteriological and cytological research

Year of studying (course)	Name of the optional course		
VI	<ol> <li>Clinical microbiology, virology and immunology. 2. Topical problems of ENT- pathology. 3.Non-medicinal methods of treatment. 4.Endocrinology.</li> <li>Organizational fundamentals of family medicine. 6.Fundamentals of transplantology.</li> <li>Clinical parasitology and tropical medicine. 8.Urgent problems of HIV-infection. 9. Management and marketing in public health service. 10.Extreme medicine. 11. Plastic and reconstructive surgery. 12. Actual problems of cardiac surgery. 13. Organizational questions of palliative and hospice medicine.</li> <li>Topical questions of neurosurgery. 15.Urgent questions of hematology and transfusiology. 16. Topical questions of cardiology. 17. Actual questions of nephrology.</li> <li>Urgent questions of clinical immunolygy and allergology. 19. Clinical aspects of immunoprophylaxis. 20.Medical aspects of bioethics and biosafety.</li> <li>Physical training and health. 22.Urgent questions of cerebrovascular pathology. 23. Convincing medicine. 24. Foreign language (by professional direction). 25. Endoscopic technology in medicine. 26. Fundamentals of Christian ethics and moralizing.</li> <li>Medical rehabilitation. 28. Clinical radiology.</li> </ol>		