

TRAINING PROGRAM OF PRIMARY SPECIALIZATION «GENERAL MEDICAL PRACTICE»

Field of knowledge:	22 «Healthcare»
Educational component:	Postgraduate education, primary specialization
Specialty:	Primary specialization «General medical practice»
Prerequisite educational background:	Master's degree in 222 «Medicine»

Introduction

The primary specialization program 'General Medical Practice' (hereinafter - the Program) is intended for training foreigners and stateless persons (hereinafter - the specialization program). The program defines the content of training in specialization, establishes the requirements for the scope and level of training of foreigners and stateless persons.

The program is developed in accordance with the normative documents of the National Medical Commission (Compulsory Rotating Medical Internship) Regulations (New Delhi, India, 2021), the Regulation on the Approval of Doctors in accordance with the Federal Laws (2023, Federal Republic of Germany), the requirements of the medical chambers of the Republic of Poland, the order of the Ministry of Health of Ukraine dated June 22, 2021, No. 1254 'On the approval of the Regulation on the Internship,' registered with the Ministry of Justice of Ukraine on August 17, 2021, under No. 1081/36703, the Law of Ukraine 'On Higher Education' and other normative documents that regulate the training of specialists in the field of knowledge 'Healthcare' at the postgraduate stage, taking into account the requirements for postgraduate training of general practitioners-family doctors of the World Organization of National Colleges, Academies, and Academic Associations of General Practitioners/Family Physicians (WONCA) and the World Federation for Medical Education (WFME) 2013.

The goal of the Program: formation of professional competencies of a general medical practitioner based on the appropriate level of practical and theoretical training.

Training of individuals in specialization is conducted according to individual educational plans developed based on the curriculum and specialization program approved by the higher education institution.

The training program in specialization is a single complex of educational and practical components planned and organized in such a way as to ensure the acquisition of competencies defined by the Program.

The training program in specialization consists of two parts: educational and practical. The educational and practical part of specialization is conducted in a higher education institution. The base of internship for foreigners and stateless persons in the specialty 'General Medical Practice' can be clinical departments located on the basis of healthcare institutions defined by the Ministry of Health as bases for internship training of doctors (pharmacists/provisors) and where the requirements for knowledge of the English language are ensured according to the Regulation on Internship.

The teaching of the main sections is carried out according to current protocols and treatment standards defined by the orders of the Ministry of Health of Ukraine regarding the provision of medical care to the relevant categories of patients.

Throughout the period of study in specialization, foreigners and stateless persons must acquire a certain list of practical skills and manipulations to form professional competencies. Four levels of skill/competency acquisition are provided: A, B, C, D.

I. PROGRAM PROFILE

Field of knowledge	22 «Healthcare»
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Educational component	Postgraduate education, primary specialization
Specialty	«General medical practice»
Prerequisite educational background	Master's degree in the field of knowledge 22 «Healthcare» in the specialty of 222 «Medicine», 228 «Pediatrics»
Educational format in primary specialization	In-person
Study language (-s) in primary specialization	Ukrainian, English
Academic rights of foreigners and stateless persons	Students from among foreigners and stateless persons who have completed training under the program of primary specialization "General medical practice" and have a state certificate of proficiency in the state language not lower than the average level of the first degree, issued by the National Commission for State Language Standards in accordance to the Law of Ukraine "On Ensuring the Functioning of the Ukrainian Language as a State Language", have the right to continue their studies at an internship training program with a shortened training period in accordance with the requirements of the order Ministry of Healthcare of Ukraine of 22 June 2021 № 1254 «On the approval of the Regulations on Internship», registered in the Ministry of Justice of Ukraine 17 August 2021 № 1081/36703.
Monitoring and evaluation	In accordance with the requirements of the order Ministry of Healthcare of Ukraine of 22 June 2021 № 1254 «On the approval of the Regulations on Internship», registered in the Ministry of Justice of Ukraine 17 August 2021 № 1081/36703.with amendments.
Mastery level	For each competence, practical skill is determined in the range from "A" to "D": A: Teaches or supervises others in performance, management, demonstration. B: Performs, manages, demonstrates independently. C: Executes, manages, demonstrates under supervision. D: Has knowledge, describes.
Scope of the program	The total duration is 12 months Theoretical training 3 months (527 hours / 17.5 ECTS credits), including an additional program of 72 hours / 2.4 ECTS credits Practical training 9 months (1263 hours, 42.1 ECTS credits)

II. ORGANIZATION OF TRAINING

The duration of training in the primary specialization is 12 months (1872 hours; 52 weeks, 62.4 ECTS credits).

Training under the program of primary specialization "General medical practice" at the relevant clinical departments of institutions of higher / postgraduate education and involves clinical work at the base facilities is 12 months (1872 hours; 52 weeks, 62.4 ECTS credits).

Training in the primary specialization "General medical practice" begins on September 1 at the department of a higher educational institution/institution of post-graduate education (or the date determined according to the individual training schedule, but no later than November 1 of the current year).

The schedule of the theoretic and practical part of the primary specialization

Months											
IX	X	XI	XII	I	II	III	IV	V	VI	VII	VIII
KO	KO	KII	KII	KII	KII	KII	KII	KII	KII	KII	KO

Note:

KO - the educational part of training at the theoretical department;

KII - the practical part of training at the clinical department;

III. LIST OF MANDATORY COMPETENCES FOR COMPLETION OF THE SPECIALIZATION

Table 1

Type of competences	Code and description of competencies
Integral competence	IC 01. The ability to independently carry out professional activities and solve clinical tasks specific to primary medical care based on a patient-oriented holistic approach in working with each patient/family, which is built on long-term trusting doctor-patient relationships regardless of social status, age, gender, origin of the medical problem and other characteristics of the patient, effective management of medical practice, ensuring accessibility, fairness and quality of primary medical care in accordance with the interests of the community and the legislation of Ukraine.

<p>General competences</p>	<p>GC 01. Ability to communicate orally and in writing in Ukrainian and/or English when filling out medical documentation and communicating with patients.</p> <p>GC 02. The ability to use information communication technologies, mastery of robotics skills with computer equipment, electronic document flow and electronic medical documentation.</p> <p>GC 03. Ability to think abstractly, search, analyze, synthesize, process information, in particular from various sources and in relation to one's field of activity.</p> <p>GC 04. Ability to analyze one's medical activity, the quality of medical care, write analytical reports, publications, create presentations, reports.</p> <p>GC 05. Ability to critical clinical thinking, analysis and solution of situational problems in medical practice.</p> <p>GC 06. Compliance with ethical and deontological norms in professional activity, bioethics, medical law (proper professional behavior).</p> <p>GC 07. The ability to cooperate in a team, to carry out effective communication in a team, to organize work in a team, to carry out the distribution of responsibilities, to involve other specialists from different levels of providing medical assistance and other services to work in a team if necessary.</p> <p>GC 08. Ability to permanent professional self-improvement, development and training, self-evaluation of one's own achievements and raising their level.</p> <p>GC 09. Demonstration of social activity and responsibility in medical activity.</p> <p>GC 10. The ability to collect medical information about the patient (in English and/or Ukrainian) and analyze clinical data, interpret the results of laboratory and instrumental studies, determine the diagnosis and patient management tactics.</p>
<p>Professional competences</p>	<p>PC 01. The ability to carry out effective management of primary medical care and the distribution of resources with an orientation to the interests of the community, epidemiological data on the incidence and prevalence of various pathological conditions, ensuring the proper quality of primary medical care and compliance with current normative and medical-technological documents, the legislation of Ukraine.</p> <p>PC 02. Ability to effectively manage a team primary medical care, involve and coordinate the work of specialists from other services to ensure patient-oriented comprehensive, integral (holistic) approaches to solving patients' problems.</p> <p>PC 03. The ability to make decisions and provide assistance in</p>

the conditions of an uncertain diagnosis, at undifferentiated patient problems and management of many variables in multisystem diseases.

PC 04. The ability to apply a comprehensive holistic approach when providing care with consideration psychosocial, religious, cultural and other aspects.

PC 05. The ability to create an optimal clinical route for the patient, taking into account the priority of acute conditions ("red flags"), the peculiarities of diagnostic and treatment approaches to providing primary medical care in cases of uncertain undifferentiated conditions (syndromes, symptoms), effective use of available resources and involving, if necessary, a multidisciplinary team to provide assistance.

PC 06. Ability to conduct patient-oriented counseling and providing medical assistance to patients (in English and/or Ukrainian), to provide continuous long-term care for chronic non-infectious diseases, to carry out their prevention, monitoring and treatment; to build a long-lasting trusting relationship with the patient and family.

PC 07. The ability to conduct motivational counseling with patients (in English and/or Ukrainian) of all age groups, on the prevention of diseases and correction of lifestyle and risk factors, adherence to a healthy lifestyle, nutrition, physical activity, stress management, combating addictions.

PC 08. The ability to conduct sanitary and educational work with the population (in English and/or Ukrainian), organize and conduct schools for patients with chronic diseases, involving members of the primary medical care team.

PC 09. The ability to assess the psychophysical development of children of different ages, to calculate the diet of a healthy and sick child, to prevent rickets and other diseases during childhood, to plan and carry out preventive vaccinations.

PC 10. The ability to provide emergency care and organize the route of a patient with emergency conditions, injuries, poisonings, wounds to patients of all age groups, pregnant women and patients with immunodeficiency.

PC 11. The ability to assess risk factors, prevention, diagnosis and treatment of the most frequent diseases and their complications in patients of all age groups, pregnant women and patients with immunodeficiency, namely: internal organs (cardiovascular, respiratory, endocrine, hepatobiliary systems; kidneys and urinary tract, gastrointestinal tract; hematopoietic organs), allergic diseases of the musculoskeletal system, female and male sexual sphere, including counseling on family planning and contraception, diseases of the ear, throat and nose, diseases of the organ of vision, skin diseases, infectious diseases, psychological and cognitive disorders, identifying and monitor mental illnesses, diseases of the nervous system, with surgical problems (including traumatic injuries, burns

	<p>and frostbite, initial treatment of wounds, minor surgical manipulations, pre-operative preparation and initial stabilization of the condition at the pre-hospital stage).</p> <p>PC 12. The ability to conduct a physiological pregnancy, monitor the condition of the pregnant woman and the fetus during physiological pregnancy.</p> <p>PC 13. The ability to organize and provide palliative care to various categories of patients at home and on an outpatient basis.</p> <p>PC 14. Ability to carry out prevention and screening of oncological diseases, precancerous conditions; draw up an individual plan for oncology screening and correction of risk factors.</p> <p>PC 15. The ability to consult, as needed rehabilitation of patients with the most frequent diseases, after surgical intervention, with post-traumatic syndrome at the level of PMC.</p> <p>PC 16. Ability to plan, organize and carry out anti-epidemic and quarantine measures, including in the conditions of the COVID-19 pandemic.</p> <p>PC 17. The ability to organize and provide medical assistance to the population in conditions of natural and man-made disasters and emergencies.</p> <p>PC 18. The ability to assess the state of health and functional capacity of patients of different age groups and the examination of work capacity.</p>
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Table 2

Resource support for program implementation	
Specific characteristics of staffing	Staffing of the educational process corresponds to the Licensing conditions for conducting educational activities of the educational institution in the field of higher education. Teaching of academic disciplines is carried out scientifically teaching staff of clinical departments institutions of higher education, who speak English at a level not lower than B2 and provide medical assistance to patients in health care institutions, which are clinical bases of departments of higher education institutions.
Specific characteristics of material and technical support	Educational units (departments) of higher education institutions have modern material and technical support, which is complemented by high-level equipment of strong clinical bases (university clinics).
Academic mobility	
National credit mobility	Provided by bilateral contracts (agreements)

IV. CONTENT OF MANDATORY COMPONENTS OF THE EDUCATIONAL PROGRAM
TABLE 1

Mandatory components Educational part at the department

№	Name course	Duration	
		hours	Credits ECTS
Course 1	Adult Health (General Practice)	72	2,4
Course 2	Child health (pediatrics, general practice)	72	2,4
Course 3	Women's health (obstetrics, gynecology, family planning and reproductive health)	72	2,4
Course 4	Men's health (urology)	36	1,2
Course 5	Management of patients with surgical problems	72	2,4
Course 6	Injuries and developmental disorders	21	0,8
Course 7	Ophthalmology	10	0,3
Course 8	Otorhinolaryngology	10	0,3
Course 9	Neurology	10	0,3
Course 10	Psychological and mental health (psychiatry)	7	0,25
Course 11	Infectious diseases	7	0,25
Course 12	Pulmonology, phthisiology	13	0,45
Course 13	Dermatovenerology	10	0,3
Course 14	Emergency medical care and initial stabilization of the patient	10	0,3
Course 15	Anesthesiology and resuscitation	30	1,0
Course 16	Physical and rehabilitation medicine	30	1
Course 17	Forensic medicine and toxicology	15	0,5
Course 18	Public health	30	1
Course 19	Optional courses: 19.1. Instrumental methods of examination of a surgical patient in general medical practice 19.2. Instrumental diagnosis of a therapeutic patient in general practice (ECG, ultrasound, diagnosis of the most common syndromes) 19.3. Emergency conditions in children in general medical practice (diagnosis of "red flags", emergency care) 19.4. Geriatric patient in general practice. Palliative and hospice care	72	2,4
	Educational part total	599	19,9

Table 2

Mandatory components of the practical part at the department			
№	Name	Duration	
		hours	Credits ECTS
1	Adult health and emergency care	156	5,2
2	Child health and emergency care	182	6,1
3	Women's health (obstetrics, gynecology, family planning and reproductive health) and emergency care	214	7,1
4	Men's health	36	1,2
5	Management of patients with surgical problems	180	6
6	Injuries and developmental disorders	50	1,75
7	Ophthalmology	30	1,0
8	Otorhinolaryngology	30	1,0
9	Neurology	36	1,2
10	Psychological and mental health (psychiatry)	30	1,0
11	Infectious diseases	25	0,8
12	Pulmonology, phthisiology	25	0,8
13	Dermatovenerology	22	0,7
14	Emergency medical care and initial stabilization of the patient	28	0,6
15	Anesthesiology and resuscitation	30	1,0
16	Physical and medical rehabilitation	42	1,4
17	Forensic medicine and toxicology	15	0,5
18	Public health	60	2
19	Optional courses: 19.1. Instrumental methods of examination of a surgical patient in general medical practice 19.2. Instrumental diagnosis of a therapeutic patient in general practice (ECG, ultrasound, diagnosis of the most common syndromes) 19.3. Emergency conditions in children in general medical practice (diagnosis of "red flags", emergency care) 19.4. Geriatric patient in general practice. Palliative and hospice care	72	2,4
	Practical part total	1263	42,1
	Examination test	2	0,25
	On-site evaluation	2	
	Practical skills test and interview	6	
	Total	1872	62,4

**V. PROGRAM RESULTS OF EDUCATIONAL AND PROFESSIONAL TRAINING PROGRAMS
(KNOWLEDGE AND PRACTICAL PART)**

Table 1

**Course 1. ADULT HEALTH AND EMERGENCY MEDICINE
(general practice)**

Duration: 228 hours / 7,6 credits ECTS

Aim Understand the basic principles of adult health formation, diagnose and treat the most common conditions, acute and chronic diseases in adults

I. Knowledge	II. Skills
<p>1. Know the International Classification of Diseases Related to Health in Primary Care Institutions (ICPC 2 (3)); ICD 10 (11).</p> <p>2. To be acquainted with the principles evidence-based medicine (levels of evidence, strength of recommendations, etc.), construction of clinical guidelines and local medical care protocols.</p> <p>3. Know the principles of building scientific research in family medicine (choosing an object, building a scientific research plan, choosing materials and methods, analyzing results).</p> <p>4. Know the principles of working with the patient, who has oncological problems: to be knowledgeable in evidence-based programs cancer screening (cervical cancer, breast cancer, skin cancer, colorectal cancer), principles of treatment of oncological diseases.</p> <p>5. Know the steps of care and the route of the patient with the most common acute and chronic diseases of the cardiovascular system: acute and chronic coronary syndromes, arterial hypertension, metabolic syndrome, non-coronarogenic diseases heart muscle, cardiac insufficiency, heart rhythm and conduction disorders, acute rheumatic fever, chronic rheumatic heart disease, infectious endocarditis, cardiopulmonary insufficiency.</p> <p>6. Know the steps of care and the route of the patient with the most common acute and chronic diseases of the cardiovascular system: acute and chronic coronary syndromes, arterial hypertension, metabolic syndrome, non-coronarogenic diseases heart muscle, cardiac failure, heart rhythm and conduction disorders, acute rheumatic fever, CRHS, infectious endocarditis, pulmonary and cardiac insufficiency. 7.</p>	<p>1. Be able to apply and interrelate the international classification of health-related problems in primary care settings (ICPC 2 (3)) and ICD 10 (11).</p> <p>2. Be able to implement evidence based recommendations in practical medical activities; to be able to work with local protocols to provide medical care.</p> <p>3. Be able to draft a publication; to be able to prepare a speech based on the materials of scientific research.</p> <p>4. Be able to conduct training in basic clinical skills, training of patients and their families, training in the chronic patient school, motivational counseling.</p> <p>5. Be able to consult patients with the goal of detection and correction of behavioral risk factors for non-communicable diseases (NCDs), assess nicotine dependence and alcohol consumption, general cardiovascular risk according to SCORE. Be able to make a plan preventive measure for chronic non-infectious diseases.</p> <p>6. To be able to apply the methods of examination of patients suspected of having an oncological disease. To be able to consult patients with oncological disease, to report "bad news".</p> <p>7. Be able to decide on and order examinations and provide outpatient treatment, carry out differential diagnosis, formulate a diagnosis for the most common conditions, acute and chronic diseases of respiratory organs: acute bronchitis, ARVI and flu, chronic bronchitis, bronchial asthma, broncho-obstructive syndrome, COPD, community-acquired pneumonia, pleurisy.</p> <p>8. To be able to decide on and order examinations and outpatient treatment, carry out differential diagnosis, formulate a diagnosis for patients with the most common acute and</p>

Know the steps of ambulatory management of patients with COVID-19, principles medical triage and screenings before hospitalization. Know the order of organization and provision of medical and social assistance to palliative patients in outpatient settings and at home.

8. Know the steps of care and the route of the patient with the most common acute and chronic conditions and diseases of the musculoskeletal system: articular syndrome, muscular symptoms, enthesitis, synovitis, tenosynovitis, back pain, neck pain, osteoporosis, osteoarthritis, osteochondrosis, chronic inflammatory joint diseases, gout, reactive arthritis, systemic connective tissue diseases, bone and joint infections, systemic vasculitis.

9. Know the procedure for outpatient management of patients with COVID-19, the principles of medical triage and indications for hospitalization.

10. Know the order of organization and provision medical and social assistance to palliative patients in outpatient settings and at home.

11 Know the steps of care and the route of the patient with the most common acute and chronic conditions and diseases of the musculoskeletal system: articular syndrome, muscular symptoms, enthesitis, synovitis, tenosynovitis, back pain, neck pain, osteoporosis, osteoarthritis, osteochondrosis, chronic inflammatory joint diseases, gout, reactive arthritis, systemic connective tissue diseases, bone and joint infections, systemic vasculitis.

12. Know the steps of care and the route of the patient with the most common acute and chronic conditions and diseases of the digestive organs: functional diseases gastrointestinal tract, esophageal diseases, stomach, duodenum, patients after surgical interventions on organs digestion, celiac disease, chronic inflammatory bowel diseases, diseases of the hepatobiliary system, functional diseases of the biliary system, chronic pancreatitis, biliary colic, diverticulosis and diverticulitis.

13. Know the steps of care and the route of the patient with the most common acute and chronic conditions and diseases of the

chronic diseases of the cardiovascular system: acute and chronic coronary syndromes, arterial hypertension, metabolic syndrome non-coronarogenic diseases heart muscle, heart failure, heart rhythm and conduction disorders, acute rheumatic fever, chronic rheumatic heart disease, infectious endocarditis, cardiopulmonary deficiencies

9. Be able to prescribe treatment for COVID-19 in an outpatient setting. Carry out monitoring, observation and rehabilitation of patients after hospitalization, management of patients with post-covid syndrome Be able to organize vaccination of different population groups for SARS-COV-2.

10. To be able to control the main clinical symptoms in palliative patients in outpatient settings and at home. Apply medical and psychological, bioethical and religious principles of palliative care.

11. To be able to identify, order examinations and treatment, carry out differential diagnosis, formulate a diagnosis for patients with the most common acute and chronic conditions and diseases of the musculoskeletal system: joint syndrome, muscle symptoms, enthesitis, synovitis, tenosynovitis, back pain, neck pain, osteoporosis, osteoarthritis, osteochondrosis, chronic inflammatory diseases of the joints, gout, reactive arthritis, systemic diseases connective tissue, bone and joint infections, systemic vasculitis.

12. To be able to decide on and order examinations and treatment, carry out differential diagnosis, formulate a diagnosis for patients with the most common acute and chronic conditions and diseases of the digestive organs: functional diseases of the gastrointestinal tract, diseases of the esophagus, stomach, duodenum, patients after surgical interventions on the digestive organs, celiac disease, chronic inflammatory bowel diseases, hepatobiliary diseases systems, functional diseases of the biliary system, chronic pancreatitis, biliary colic, diverticulosis and diverticulitis

13. To be able to decide on and order examinations and treatment, conduct differential diagnosis, formulate a diagnosis for patients with the most common acute and chronic diseases of the kidneys and urinary tract: urinary tract infections (cystitis, ure-

kidneys and urinary tract: urinary tract infections (cystitis, urethritis, pyelonephritis), tubulointerstitial nephritis, glomerulonephritis/nephrosis, urolithiasis, nephropathies (diabetic, hypertensive, urate, myeloma, amyloidosis, etc.), chronic kidney disease, acute kidney injury.

14. Know the steps of care and the route of the patient with the most common acute and chronic conditions and diseases of the endocrine system: problems related to nutrition, leading to metabolic disorders (disorders appetite, weight changes, growth retardation, electrolyte-water metabolism disorders, vitamin/nutrient deficiency), obesity and overweight, disorders of lipid metabolism and protein/purine metabolism (hyperuricemia), prediabetes, diabetes, thyroid diseases (iodine deficiency conditions, hypothyroidism, hyperthyroidism, nodular and diffuse goiter), diseases of the pituitary gland and hypothalamus, diseases of the adrenal glands.

15. Know the steps of care and the route of the patient with the most common acute and chronic immune disorders and diseases of organs hematopoiesis: lymphadenopathy, anemias, oncohematological diseases (lymphoma, leukemia, myeloma disease, lymphogranulomatosis), hypersplenism, disorders blood clotting, purpura, immunodeficiency, allergic diseases and conditions, urticaria, anaphylaxis.

16. Know the procedure for managing patients old and senile age. Be knowledgeable in the basics of social of gerontology.

17. To know the clinical pharmacology of groups medicines that are used in the outpatient clinic treatment of internal diseases organs in adults, mechanism of action, interaction with other drugs, the most frequent side reactions at application; indications and contraindications.

18. Know the procedure for providing emergency, first medical aid in emergency situations.

19. Prevention of vaccine-controlled diseases, including pregnant women, in the postpartum period and during breastfeeding.

thrititis, pyelonephritis), tubulointerstitial nephritis, glomerulonephritis/nephrosis, urolithiasis, nephropathy (diabetic, hypertensive, urate, myeloma, amyloidosis, etc.), chronic kidney disease, acute kidney injury.

14. To be able to decide on and order examinations and treatment, carry out differential diagnosis, formulate a diagnosis for patients with the most common acute and chronic conditions and diseases of the endocrine system: problems related to nutrition that led to metabolic disorders (appetite disorders, weight changes, growth retardation, electrolyte-water metabolism disorders, vitamin/nutrient deficiencies

substances), obesity and overweight, disorders of lipid metabolism and protein/purine metabolism (hyperuricemia), prediabetes, diabetes, diseases of the thyroid gland (iodine-deficient conditions, hypothyroidism, hyperthyroidism, nodular and diffuse goiter), diseases of the pituitary gland and hypothalamus, diseases of the adrenal glands.

15. To be able to decide on and order examinations and treatment, carry out differential diagnosis, formulate a diagnosis for patients with the most common acute and chronic immune disorders and diseases of hematopoietic organs: lymphadenopathy, anemias, oncohematological diseases (lymphoma, leukemia, myeloma disease, lymphogranulomatosis), hypersplenism, blood coagulation disorders, purpura, immunodeficiencies, allergic diseases and conditions, urticaria, anaphylaxis.

16. Be able to provide primary medical care assistance to patients with the most frequent geriatric syndromes (syndromes senile weakness, sarcopenia, bedsores, urinary incontinence, sleep disorders, mental, psychological, cognitive problems).

17. To be able to provide primary medical care and assistance in emergency situations at the pre-hospital stage patient route.

18. Be able to consult regarding issues of prevention of vaccine-controlled infections (vaccination) in all age groups, pregnant women and patients with immunodeficiency.

Table 2

Practical skills/ competence

№	List of Practical skills/ competence	Skill level	Required number of activities, medical procedures (if quantifiable)
1	<p>Make a plan and conduct training and counseling of patients with the most common chronic conditions non-infectious diseases and risk factors for their development (education in controlled self-behavior of bronchial asthma, diabetes school, education of patients with chronic heart failure, cardiovascular risk factors diseases); on prevention of vaccine-controlled infections; conducting a pre-test and post-test counseling on indication of HIV infection); counseling of persons with intellectual disorders.</p>	B	1 for each chronic non-infectious disease listed
2	Coding according to the ICPC-2 classifica-	B	10 or more
3	Conduct motivational counseling to support a healthy lifestyle, smoking cessation, healthy nutrition, physical activity, prevention of diseases that transmitted sexually	B	2 for each issue
4	<p>Interpretation of the results of laboratory and instrumental methods studies in adults:</p> <ul style="list-style-type: none"> - complete blood count; - biochemical indicators of blood; - acute-phase indicators of inflammation; - lipidograms; - blood clotting system; - tests to detect diabetes; - tests to detect SARS-Cov-2; - general analysis of urine; - sputum; - stool test, coprogram; - gastric secretions; - duodenal contents; - biological fluids of the pericardium, pleura, abdominal cavity; - cytological; 	B	Every time when analyzing a clinical case (10 or more for each test)

	<ul style="list-style-type: none"> - secretions of female and male genital organs; - hormones; - serological; - immunological; - allergy tests; - X-ray; - endoscopy; - electrocardiography; - ultrasound [incl. echocardiography]; - tests with dosed physical loads (cycling ergometry, treadmill); - Holter ECG and blood pressure monitoring; - functions of external breathing; - blood gases and acid-base balance 		
5	Blood pressure measuring on upper and lower limbs	A	10 and more
6	Recording and interpretation of ECG in adults	A	10 and more
7	Methodology and assessment of the results of a 6-minute walk test	B	10 and more
8	Use of inhalers and nebulizers	A	10 and more
9	Pulse oximeter	A	10 and more
10	Peak flowmetry	A	10 and more
11	Conducting and interpreting results of rapid tests, in particular for SARS-Cov2, troponin level; determination of blood glucose with a glucometer; urine ketones and glucose and others	A	10 and more
12	Emergency care for:		
	- acute coronary syndrome	B	2 and more
	- broncho-obstructive syndrome	B	2 and more
	- acute heart rhythm disturbances	B	5 and more
	- hypertensive crises	B	5 and more
	- allergic reactions	B	2 and more
	- hyperthermia	B	5 and more
	- hypo-/ hyperglycemia	B	5 and more
	- thyrotoxic crisis	B	1 and more
	- spontaneous pneumothorax	B	1 and more
	- pulmonary edema	B	2 and more
	- thromboembolism of the pulmonary artery and main arteries of the limbs	B	1 and more
	- acute kidney injury	C	1 and more
	- acute liver failure	C	1 and more
	- acute adrenal failure	B	1 and more

	- renal, biliary colic	B	2 and more
13	Methods of restoring patency of the upper respiratory tract	A	10 and more
14	Use of a laryngeal mask	B	1 or more (at a training center)
15	Defibrillation	B	1 or more (at a training center)
16	Cardiopulmonary resuscitation of adults	B	10 and more
17	Coniotomy	D	1 or more (at a training center)
18	Tracheotomy	D	1 or more (at a training center)

Table 3

Course 2. Children's health and emergency medicine (pediatrics, general practice)

Duration: 254 hours / 8,5 credits ECTS

Aim	Understand the basic principles of child health formation and the provision of medical care to children at the primary level: management of a healthy child, organization and support of breastfeeding, integrated management of childhood diseases, management and route of childhood patients with the most common diseases according to modern recommendations	
I Knowledge		II Skills
<p>1. Know the basic principles of the organization of children's health care in Ukraine, orders and instructions on children's health care.</p> <p>2. Know the main statistical indicators of children's health.</p> <p>3. Know the main preventive strategies ensuring the healthy development of children and adolescents: assessment of physical development, medical and psychological aspects.</p> <p>4. Know the principles of integrated management of childhood diseases.</p> <p>5. Know the main symptoms of chronic eating disorders.</p> <p>6. Know the scheme of immunization of children and teenagers, types and features of vaccines, contraindications to vaccination.</p> <p>7. Know the peculiarities of physiology and</p>		<p>1. To be able to organize the provision of medical care assistance, counseling families with children with special needs</p> <p>2. To be able to organize a hospital stay at home.</p> <p>3. To be able to conduct a physical examination child and evaluate the received data according to the age norm.</p> <p>4. Be able to organize support breastfeeding, evaluate the correctness of attaching the child to the breast and the effectiveness of breastfeeding.</p> <p>5. To be able to advise the mother and provide appropriate information regarding rational feeding of the child.</p> <p>6. Be able to assess and classify signs of danger in a child's condition, determine treatment according to the principles of integrated management of childhood diseases.</p>

<p>development of newborns, premature children.</p> <p>8. Know the signs of borderline states in newborns</p> <p>9. Know the peculiarities of management and the route of patients with diseases in the newborn period.</p> <p>10. Know organizational principles assistance to patients with hereditary diseases.</p> <p>11. Know the basic principles of management and route of pediatric patients with the most common acute and chronic respiratory diseases.</p> <p>12. Know the basic principles of management and route of pediatric patients with the most common allergic diseases.</p> <p>13. Know the basic principles of management and route of pediatric patients with the most common acute and chronic diseases of organs blood circulation and musculoskeletal system.</p> <p>14. Know the basic principles of management and route of pediatric patients with the most common acute and chronic blood diseases, hematopoietic organs.</p> <p>15. Know the basic principles of management and route of pediatric patients with the most common acute and chronic diseases of digestive organs.</p> <p>16. Know the basic principles of management and route of pediatric patients with the most common diseases of the kidney and urinary tract.</p> <p>17. Know the basic principles of management and route of pediatric patients with the most common endocrine/metabolic disorders.</p> <p>18. Know the main symptoms of oncological diseases in children and the route of childhood patients with oncology.</p> <p>19. Know the basic principles of providing first aid in case of emergency conditions in children at the pre-hospital stage.</p>	<p>7. To be able to consult parents and provide appropriate information regarding child's vaccinations, make an individual calendar of vaccinations child.</p> <p>8. To be able to organize the provision of nutritional needs of children of different age groups in case of certain diseases.</p> <p>9. To be able to advise parents on the care of a newborn child.</p> <p>10. Be able to evaluate the risk factors of genetic diseases and the results of screening for the main genetic diseases in newborns.</p> <p>11. Be able to conduct a physical examination of a sick child and evaluate the obtained data.</p> <p>12. Be able to decide on a clinical, laboratory and instrumental examination plan of a sick child.</p> <p>13. Be able to evaluate the data of clinical test of urine, blood and instrumental methods of examining a child.</p> <p>14. To be able to carry out diagnosis and differential diagnosis of the most common childhood diseases.</p> <p>15. To be able to draw up a plan for treatment, rehabilitation and prevention of the most common childhood diseases.</p> <p>16. Be able to provide emergency medical care help with anaphylactic shock, infectious-toxic shock, acute cardiovascular failure, convulsions, hyperthermic syndrome.</p> <p>17. To be able to draw up an individual vaccination plan for children who are vaccinated with violations of the Vaccination Calendar.</p> <p>18. Be able to suspect an oncological or hematological disease in a child and refer the patient to other healthcare facilities for further examination.</p>
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Table 4

Practical skills/ competence

№	List of Practical skills/ competence	Skill level	Required number of activities, medical procedures (if quantifiable)
1	Coding according to the ICPC classification	B	10 or more
2	Interpretation of the results of laboratory and instrumental exams in children: <ul style="list-style-type: none"> - complete blood count; - biochemical indicators of blood; - blood clotting system; - tests to detect diabetes; - tests to detect SARS-Cov-2; - general urine analysis, urine analysis according to Nechiporenko, Zimnytskyi; - sputum, smear-imprint of the nasal mucosa; - poop, co-programs; - gastric secretions; - duodenal contents; - biological fluids of the pericardium, pleura, abdominal cavity; - cytology; - hormones; - serological; - immunological; - allergy tests; - X-ray; - endoscopy; - ultrasonic; - functions of external breathing; - results of bacteriological and virological cultures - blood gases and acid-base balance 	B	Every time when analyzing a clinical case (10 or more for each test)
3	Measurement of blood pressure on the upper and lower extremities, using a set of cuffs for children	A	10 or more
4	Recording and decoding of ECG in children	A	10 or more
5	Use of inhalers and nebulizers	A	10 or more
6	Pulse oximeter	A	10 or more
7	Peak flowmetry	A	10 or more
8	Conducting and interpreting results of rapid tests, in particular for SARS-Cov2, troponin level; determination of blood glucose with a glucometer; urine ketones and glucose and others	A	10 or more

9	Prescribe rational nutrition taking into account the type of feeding (natural, artificial, mixed) for children of the 1st year of life	A	10 or more
10	Care of the umbilical cord, skin condition of the newborn	A	10 or more
11	Technique of early breast latching of a newborn	A	10 or more
12	Evaluate the latching efficiency of the newborn	A	10 or more
13	Establishing “skin-to-skin” contact	A	5 or more
14	Assessment of physical and psycho-emotional development of the infant	B	10 or more
15	Assessment of physical and mental development of a child from 1 year to 3 years	B	10 or more
16	Detecting Ortolani and Barlow symptoms to diagnose dysplasia of the hip joints	B	10 or more
17	Vaccination calendar in Ukraine. Drawing up an individual plan of vaccinations for a child who is vaccinated with violation of the vaccination calendar	A	10 or more
18	Methods of restoring patency upper respiratory tract	A	10 or more
19	Use of a laryngeal mask	B	1 or more (at a training center)
20	Use of an S-shaped laryngeal tube	B	1 or more (at a training center)
21	Defibrillation	B	1 or more (at a training center)
22	Cardiopulmonary resuscitation of children	B	10 or more

Table 5

Course 3. WOMEN'S HEALTH (obstetrics, gynecology, family planning and reproductive health) and emergency medicine

Duration: 286 hours/ 9,5 credits ECTS

Aim	Understand the physiological features of the female body in different periods of life; master outpatient management of patients with reproductive and gynecological problems; women with physiological pregnancy and in the postpartum period, in menopause	
	I Knowledge	II Skills
	1. Know the physiology of the female body in different periods of life, normal development (and options), defects in the development of the female reproductive system. Changes in the female body during puberty, pregnancy, and menopause. 2. Know the classification, diagnosis and	1. Able to advise the patient/family on issues of reproductive health and infertility, contraception, healthy lifestyle, preparation for pregnancy, during pregnancy and preparation for childbirth and breastfeeding. 2. Able to prescribe various methods of contraception depending on the age and health of

methods of treatment of menstrual cycle disorders, premenstrual syndrome.

3. Know the reasons, differential diagnosis, possibilities of outpatient examination and treatment of genital pain, menstrual pain, pain during intercourse, pelvic pain, pain in the mammary glands.

4. Know the causes, differential diagnosis, possibilities of outpatient treatment examination and treatment, healthcare route of patients with vaginal discharge, vaginal bleeding, with changes in the cytological examination of the cervix uterus.

5. Know the clinical manifestations, diagnosis, principles of treatment and route of a patient with polycystic ovary syndrome, fibromyoma, endometriosis.

6. Know precancerous and oncological conditions diseases of the female genital area (uterus, endometrium, cervix uterus, ovaries), clinical manifestations, screening programs, risk factors, principles of treatment and route female patients

7. Know the risk factors, classification, diagnosis, screening of breast neoplasms, principles of treatment and rehabilitation, healthcare route of the patient.

8. Know diagnostics, prevention and outpatient treatment and route of patients with inflammatory gynecological diseases, sexually transmitted diseases and venereal diseases.

9. Know the main diseases and conditions that lead to female infertility, risk factors, diagnosis, principles of treatment, counseling and the route of the patient.

10. Know the organization of the service family planning, features counseling of teenagers and young people on reproductive health issues.

11. Know methods of contraception, classifications, mechanism of action, advantages, disadvantages, required examination before use, start of use, mode of use, side effects, instructions for the patient, emergency contraception.

12. Know recommendations for prenatal preparation, examination of a woman, determining the state of health and risks during pregnancy, prescribing preventive measures and lifestyle correction, prenatal prevention.

13. Know the reasons, risk factors, prevention, symptoms of spontaneous abortion at different stages of pregnancy, emergency

the woman.

3. Able to conduct a gynecological examination, take smears from the vagina, cervix and interpret their results and conduct counseling.

4. Able to consult a patient with an irregular menstrual cycle, premenstrual syndrome, pain, inflammatory diseases of female genital organs, prescribe examination and outpatient treatment, determine the patient's route.

5. Able to consult a patient with benign tumors of the female genital area, prescribe an examination plan, outpatient treatment and determine the patient's route.

6. To be able to advise women about physiological and pathological menopause, prescribe outpatient treatment and examination, determine the patient's route.

7. Be able to plan and conduct screening precancerous diseases of the female genital area and mammary glands and cancer, to conduct counseling based on the results of the examination and make appointments route of the patient.

8. Able to advise patients on the prevention of sexually transmitted diseases, venereal diseases; carry out their diagnosis, emergency prevention of these infections, prescribe emergency contraception, outpatient treatment and determine the patient's route.

9. Able to make a treatment plan and monitor a woman with physiological pregnancy, assess the condition of the fetus during pregnancy, detect high-risk pregnancies, determine the patient's route.

10. Able to diagnose and prescribe outpatient treatment for early toxicosis of pregnant women; identify factors risk, carry out diagnostics and provide reliable assistance in preeclampsia and eclampsia.

11. Understand how to provide medical assistance during childbirth outside the hospital.

12. Able to advise women on issues healthy lifestyle, support lactation, prevention of complications in in the postpartum period, carry out outpatient treatment of such complications and determine the patient's route.

13. Able to consult women with extragenital pathologies regarding reproductive health, contraception, treatment of somatic diseases during pregnancy and breastfeeding, determine the examination plan and route of the patient.

14. Understand how to provide emergency care help to women, including pregnant

<p>care, route female patients; termination of pregnancy: counseling, methods, route of female patients</p> <p>14. Know the algorithm of management of a woman with a physiological pregnancy, a monitoring plan for the condition of the fetus and pregnant woman, counseling on preparation for childbirth and feeding.</p> <p>15. Know the causes, differential diagnosis, emergency care, route of a patient with vaginal bleeding/discharges during pregnancy, ectopic pregnancy.</p> <p>16. Know the features of the course, counseling, monitoring, termination of teenage pregnancy.</p> <p>17. Know the classification, symptoms, system for assessing the severity of toxicosis pregnant women, assistance, examination, counseling, route of a patient with early toxicosis; prevention, diagnosis, risk factors, emergency care for preeclampsia and eclampsia.</p> <p>18. Know the physiology of normal childbirth, the algorithm for providing assistance outside the hospital setting, legal aspects, methods of umbilical cord treatment and removal of the placenta.</p> <p>19. Know the physiology of the postpartum period, monitoring of uterine contractions, prevention and outpatient treatment of complications (sepsis, depression, etc.).</p> <p>20. Know the physiology of lactation, counseling and methods of lactation support, complications (mastitis).</p> <p>21. Know the classification of safe-to-use medicines in pregnant and lactating women, clinical pharmacology of medicines approved for use in pregnant women for the treatment of the most frequent diseases (hypertension, urinary tract infections, SARS, pain).</p>	<p>women - with vaginal bleeding, genital injuries, ectopic pregnancy, ovarian apoplexy, preeclampsia and eclampsia, out-of-hospital childbirth, mastitis, postpartum depression and determine route of the patient.</p>
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Table 6

Practical skills/competence

№	List of Practical skills/ competence	Skill level	Required number of activities, medical procedures (if quantifiable)
1	Interpretation of the results of the main laboratory and instrumental methods of examination in pregnant women	B	5 or more

2	Interpretation of the results of allocations female genitalia	B	5 or more
3	Make a plan for maintaining a physiological pregnancy	B	5 or more
4	Conducting an express pregnancy test	A	5 or more
5	Measurement of the standing height of the bottom of the uterus, the circumference of	B	5 or more
6	Determine the term of pregnancy and the term of delivery by the dates of the last menstruation and the first movement of the fetus	B	5 or more
7	Assessment of the condition of the fetus (auscultation of the heartbeat, conducting a gravigram)	B	5 or more
8	Gynecological examination. Bimanual examination	B	5 or more
9	Gynecological examination using a speculum	B	5 or more
10	Collection material from the vagina for bacteriological study	B	5 or more
11	Collection of material from the cervix for cytological examination	B	5 or more
12	Examination and palpation of the breasts	A	5 or more
13	Family planning counseling	B	5 or more
14	Application of various methods contraception	B	5 or more
15	Consulting regarding prevention of sexually transmitted infections	B	5 or more

Table 7

Course 4. MEN'S HEALTH (urology)

Duration 72 hours / 2,4 credits ECTS

Aim	Understand the physiological features of a man's body in different periods of life; master the management of patients with men's health problems	
	I Knowledge	II Skills
	<p>1. Know male physiology in different periods of life, normal development (and variants), developmental defects of the male reproductive system (hypospadias, phimosis, undescended testicle, others). Body changes during puberty, andropause.</p> <p>2. Know the reasons, differential diagnosis, possibilities of outpatient examination and treatment at genital pain (penis, scrotum, testicles, priapism, dropsy), pelvic pain.</p> <p>3. Know the causes, differential diagnosis, possibilities of outpatient examination and treatment, route of the patient with discharge from the urethra.</p>	<p>1. Able to advise the patient on regarding reproductive health and infertility, sexual health, contraception, healthy lifestyle, prevention of STDs.</p> <p>2. Able to conduct an examination of the genitals, take smears from the urethra, interpret their results and conduct counseling.</p> <p>3. Able to consult a patient with defects in the development of genital organs and determine the patient's route.</p> <p>4. Able to consult a patient with pain in the genitals, inflammatory diseases of the sexual sphere, STDs, prescribe outpatient treatment, determine the route of the patient.</p> <p>5. Able to consult the patient, plan and carry out</p>

<p>4. Know clinical manifestations, diagnosis, outpatient treatment and route a patient with inflammatory diseases of the genital area (orchitis, epididymitis, prostatitis, vasculitis, balanitis, others).</p> <p>5. Know clinical manifestations, diagnosis, outpatient treatment and route patients with sexually transmitted diseases.</p> <p>6. Know the examination algorithm, differential diagnosis, emergency care and the route of a patient with urinary retention.</p> <p>7. Know etiopathogenesis, clinical manifestations, differential diagnosis, outpatient treatment and route of a patient with benign prostate hyperplasia.</p> <p>8. Know the prostate cancer screening program, laboratory and instrumental, clinical methods of examining a patient with suspected prostate cancer.</p> <p>9. Know precancerous conditions and oncological diseases of the male genital area, risk factors, treatment principles and the patient's route.</p> <p>10. Know the risk factors, classification, diagnosis and prevention of male reproductive and sexual health disorders, treatment methods and patient route; methods of male contraception.</p>	<p>prostate cancer screening, determine the patient's route.</p> <p>6. Able to consult a patient with benign prostate hyperplasia, conduct monitoring and ambulatory treatment, determine the patient's route.</p> <p>7. Able to provide emergency care to patients with acute urinary retention, pain, priapism, acute inflammatory conditions.</p>
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Table 8

№	List of Practical skills/ competence	Skill level	Required number of activities, medical procedures (if quantifiable)
1	Interpretation of test results of the discharge from male genitalia	B	5 or more
2	Digital rectal exam	B	5 or more
3	Bladder catheterization using an elastic catheter in adults and children	B	5 or more (at a training center)

Table 9

Course 5. MANAGEMENT OF PATIENTS WITH SURGICAL PROBLEMS

Duration 252 hours / 8,4 credits ECTS

Aim	Understand the most frequent surgical problems of patients of various ages, provide them with emergency care and draw up an examination plan and route; organize and manage patients after surgery at home/outpatient clinic
I Knowledge	II Skills
1. Know clinical manifestations, diagnosis	1. Able to carry out diagnostics, examination

<p>and differential diagnosis the most frequent conditions and diseases of adults and children that require surgery treatment: acute abdomen (appendicitis, pinched hernia, acute cholecystitis, complicated GI ulcer, gastrointestinal obstruction, diverticulitis, ischemic colitis, acute pancreatitis); thrombosis and thromboembolism, respiratory obstruction</p> <p>ways, hemothorax, pneumothorax; injuries of the chest, head, abdomen, limbs; external and internal bleeding.</p> <p>2. Know the methods and drugs for various methods of anesthesia, ways of administration.</p> <p>3. Know the algorithm of primary surgical treatment of wounds, wound suturing methods, infection prevention.</p> <p>4. Know the rules of asepsis and antiseptics during outpatient treatment surgical manipulations.</p> <p>5. Know the rehabilitation algorithm of patients after surgical interventions at home and on an outpatient basis.</p> <p>6. Know diagnostics and ambulatory care treatment of furunculosis, hidradenitis, carbuncle, dysentery.</p> <p>7. Know the clinical manifestations and methods of diagnosis, prevention, and treatment of abdominal, inguinal, and diaphragmatic hernias.</p> <p>8. Know clinical manifestations, diagnosis and differential diagnosis, methods treatment of diseases of the anal area (hemorrhoids, anal fissure, paraproctitis).</p> <p>9. Know the clinical manifestations, risk factors, diagnosis and methods of treatment of varicose veins of the lower extremities and its complications.</p>	<p>and assessment of the condition of patients of various ages with suspicion of the condition/ a disease requiring surgical treatment.</p> <p>2. Able to provide emergency care and determine the route of patients of various ages with basic conditions and diseases that require surgical treatment.</p> <p>3. Able to carry out general resuscitation measures for patients of various ages, cardiopulmonary resuscitation and basic life support.</p> <p>4. Able to perform primary surgical treatment of wounds; anesthesia; suturing wounds; applying bandages; prevention infections; removal of stitches; assessment of the condition of the wound.</p> <p>5. Able to draw up a patient management plan at home/ambulatory after surgery interventions (bandages, analgesia, drain care, wound assessment, diagnosis of complications (delirium, fever, sepsis, infection, allergic reactions, shock, urinary retention, oliguria, bleeding); food and drink, movement mode; rehabilitation).</p> <p>6. Able to carry out outpatient treatment, including surgical for carbuncle, furuncle, furunculosis, impetigo; burns and frostbite.</p> <p>7. Able to conduct an examination, provide primary medical and emergency care, outpatient treatment and draw up a patient's route for diseases of the anal area (hemorrhoids, anal fissure, paraproctitis).</p> <p>8. Able to carry out diagnostics, prevention and outpatient treatment of patients with varicose veins of the lower extremities and PTS.</p> <p>9. Able to perform outpatient minimally invasive diagnostic and therapeutic surgical interventions (removal of lipomas, warts, growths, ingrown nails; treatment of carbuncle, furuncle, hidradenitis; take skin biopsy, needle and incisional biopsy).</p> <p>10. Able to conduct counseling patients and their families regarding surgical manipulations and interventions, anesthesia, biopsies.</p>
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Table 10

Practical skills/ competence

№	List of Practical skills/ competence	Skill level	Required number of activities, medical procedures (if quantifiable)
1	Primary surgical treatment of wounds	B	2 and more
2	Care and treatment of bedsores, trophic ulcers	B	2 and more
3	Treatment of the burn surface	B	2 and more

4	Applying and removing stitches	B	2 and more
5	Opening of superficial abscesses of the skin and subcutaneous tissues	B	2 and more
6	Stopping external bleeding (applying a tourniquet, a tight bandage, squeezing the arteries)	B	2 and more
7	Administration of local anesthesia (infiltration, conductive and novocaine blockades)	B	2 and more
8	Gastric lavage	B	2 and more
9	Digital examination of the rectum	B	2 and more

Table 11

Course 6. INJURIES AND DEVELOPMENTAL DISORDERS
Duration 71 hours / 2,55 credits ECTS

Aim	Master the provision of care to patients of various ages with injuries and congenital defects of the musculoskeletal system		
I Knowledge		II Skills	
<p>1. Know the clinical manifestations, classifications, methods of diagnosis, algorithms for providing emergency and primary medical care and the route of patients of various ages with bone fractures (extremities, shoulder girdle, spine, pelvis, skull, ribs).</p> <p>2. Know the clinical manifestations, diagnostic methods, algorithms for providing emergency and primary medical care, the route of patients with dislocations/sub-dislocations, injuries/dislocations of the knee, shoulder, elbow, shin-scapula, and other joints.</p> <p>3. Know the mechanisms of development, classification, diagnosis, prevention of complications, algorithms of examination and emergency care for chest and abdominal injuries cavity, pelvic organs; craniocerebral injury.</p> <p>4. Know clinical manifestations, factors risk, classifications, methods diagnostics, management algorithms patients with congenital defects development (crookedness, clubfoot, hip dysplasia), posture disorders, flat feet.</p> <p>5. Know the system and algorithm of determination work capacity and rehabilitation patients after injuries, prosthetics.</p> <p>6. Know the principles of application and types of orthopedic equipment.</p>		<p>1. Able to diagnose, examine and assess the condition of patients of various ages with suspected trauma or fracture.</p> <p>2. Able to provide emergency aid and determine the route of patients of various ages with various injuries, fractures, dislocations, injuries; with crushing syndrome (analgesia, immobilization, anti-shock measures, stopping bleeding, prevention of complications, medical triage, patient route).</p> <p>3. Able to conduct an examination and clinical diagnosis and make a plan of examination and outpatient treatment of a patient with congenital defects of the musculoskeletal system (dysplasia of the hip joints, torticollis, clubfoot).</p> <p>4. Able to conduct an examination and clinical diagnosis and make an examination plan and outpatient treatment of a patient with posture disorders, flat feet.</p> <p>5. Able to advise patients on the use of orthopedic devices, restorative techniques after injuries and prosthesis.</p> <p>6. Able to conduct counseling and education of patients/families with prevention and treatment of postural disorders, physical therapy, principles of treatment and rehabilitation.</p>	

Table 12

Practical skills/ competence

№	List of Practical skills/ competence	Skill level	Required number of activities, medical
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			procedures (if quantifiable)
1	Transport immobilization	B	5 or more
2	Cervical collar application	B	5 or more

Table 13

Course 7. OPHTHALMOLOGY

Duration 40 hours / 1.3 credits ECTS

Aim	Master the basics of prevention, screening of vision disorders and providing assistance to patients of various ages with the most frequent diseases of the organ of vision		
I Knowledge		II Skills	
<p>1. Know the anatomy and physiology of the visual analyzer in patients of various ages.</p> <p>2. Know the main symptoms and syndromes with pathology of the organ of vision; needs of patients with chronic/progressive visual impairment, age-related and toxic macular degenerative diseases.</p> <p>3. Know the influence of somatic diseases and drugs used for their treatment on the condition of the eye; and the effect of drugs for local eye treatment on the systemic functions of the body.</p> <p>4. Know the ocular manifestations of chronic diseases (hypertension, diabetes, systemic connective tissue diseases, vasculitis, syphilis, cysticercosis, HIV, tuberculosis, toxoplasmosis, rubella, myasthenia gravis, poisoning, multiple sclerosis, cerebral palsy, etc.).</p> <p>5. Know the main manifestations, diagnosis and methods of treatment of congenital defects of the organ of vision (epicanthi, coloboma, ankyloblepharon, etc.).</p> <p>6. Know the manifestations, methods of diagnosis and treatment of inflammatory eye diseases (infectious conjunctivitis; allergic conjunctivitis; blepharitis, barley, chalazion; keratitis; dacryocystitis, dacryoadenitis; corneal ulcer; trachoma, herpetic lesion, mollusk; sclerite; episcleritis, uveitis, hypopyon); when using lenses (keratitis, corneal hypoxia, keratoconjunctivitis).</p> <p>7. Know classification, methods diagnostics and prevention and treatment of refractive errors (ametropia, anisometropia, astigmatism, presbyopia, amblyopia), cataracts, glaucoma, retinopathy and macular</p>		<p>1. Able to conduct an eye and accessory apparatus examination, determine visual acuity, eye mobility, reaction to light, slit lamp examination, ophthalmoscopy, pressure determination and interpret the results</p> <p>2. Able to draw up a plan of loading and outpatient treatment of a patient with diseases of the eye and accessory eye apparatus; perform glaucoma screening</p> <p>3. Able to provide emergency aid in case of injuries, acute attack of glaucoma and other urgent conditions in ophthalmology.</p> <p>4. Able to conduct counseling and education of patients with chronic/progressive diseases of the organ of vision, prescribe and apply local medicinal products; after surgery treatment of diseases of the eye and accessory apparatus.</p> <p>5. Able to conduct counseling for patients/ families regarding prevention and treatment of refractive disorders, modern surgical methods of treatment eye diseases, use of glasses and lenses.</p>	

<p>dystrophy, strabismus, blindness, neoplasms of the eye and its appendages.</p> <p>8. Know the symptoms, the algorithm for providing emergency care and the patient's route in case of emergency conditions: retinal detachment, acute circulatory disturbance of the central vein and retinal artery and its branches; electrophthalmia; contusion/hemorrhage of the eye and its accessory apparatus; foreign body in the eye; traumatic damage to the organ of vision; sunburn of the retina; acute attack of glaucoma.</p> <p>9. Know the types and methods of correction of the main visual defects (glasses, lenses).</p> <p>10. Know the indications for referral to specialists and special examination methods (ultrasound, OCT, angiography, MRI, etc.).</p>	
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Table 14

Practical skills/ competence

№	List of Practical skills/ competence	Skill level	Required number of activities, medical procedures (if quantifiable)
1	External examination of the eyelids and conjunctiva	B	5 or more
2	Assess visual acuity using optical tables	B	5 or more
3	Assess the field of vision using a set of lenses	B	5 or more
4	Assess color perception	B	5 or more
5	Measurement and assessment of intraocular pressure by palpation method and tonometry method, including transpalpebral	B	5 or more
6	Examination of the fundus by direct ophthalmoscopy	B	5 or more
7	Therapeutic manipulations: - washing of the conjunctival cavity and cornea - apply drops and place ointment in the conjunctival sac - removal of superficial foreign bodies from the conjunctiva	B B B	5 or more 5 or more 5 or more

Table 15

Course 8. OTOLARYNGOLOGY

Duration: 40 hours / 1,3 credits ECTS

Aim	Master the basics of prevention, diagnosis and treatment of patients of all age groups with the most frequent diseases of ENT organs
I Knowledge	II Skills

<ol style="list-style-type: none"> 1. Know the anatomy and physiology of the ENT organs in patients of various ages. 2. Know the main symptoms and syndromes of ear diseases (otalgia, hearing impairment, tinnitus, discharge from the ear, congestion in the ears, sulfur plug, dizziness, otosclerosis, deafness, presbycusis; diseases of the external ear and auditory canal, diseases of the middle ear; inner ear tubotitis), differential diagnosis, route of the patient. 3. Know the main symptoms and syndromes in diseases of the throat and nose (acute and chronic pharyngitis, laryngitis, tracheitis; tonsillitis, hypertrophy of the tonsils/adenoids; rhinitis; sinusitis; adenoiditis; diseases of the external nose); examination methods, differential diagnosis, route of the patient. 4. Know the clinical manifestations, the algorithm for providing emergency care, patient route for foreign bodies and injuries of the ENT organs, burns, acoustic ear injury, perforation of the eardrum, acute otitis media, bleeding from the ENT organs, acute asphyxia, laryngeal edema, laryngeal stenosis. 5. Know the indications for referral to consultation of narrow specialists, special methods of examination of ENT organs. 6. Know the symptoms, the algorithm providing emergency care and the patient's route during development orbital and intracranial complications, infectious and inflammatory diseases of the ENT organs. 7. Know the symptoms, algorithms of examination and route of a patient with neoplasms of the ENT organs. 8. Know the features of diseases of the ENT organs in young children, their diagnosis and the route of the patient. 9. Know clinical pharmacology medicines that are used to treat the ear, throat, and nose; drugs that have neuro-/ototoxic effects. 	<ol style="list-style-type: none"> 1. Able to conduct an examination of the ENT organs, determine hearing acuity and interpret the results in patients of all age groups. 2. Able to decide on a diagnostic and outpatient treatment plan of a patient with diseases of ENT organs. 3. Able to provide emergency care for injuries and other emergency conditions for diseases of the ENT organs. 4. Able to conduct counseling and teaching patients with diseases of the ENT organs, to prescribe and apply local and systemic drugs. 5. Able to conduct counseling patients/families on the prevention and treatment of nasal breathing disorders, modern surgical methods of treating diseases of the ear, throat, and nose; treatment of hard of hearing and deafness.
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Table 16

Practical skills/ competence

№	List of Practical skills/ competence	Skill level	Required number of activities, medical procedures (if quantifiable)
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1	Examination of the external ear and tympanic membrane with a reflector and an otoscope	B	10 and more
2	Assessment of hearing acuity: spoken speech and whispered speech	B	10 and more
3	Removal of an uncomplicated foreign body from the ear, throat, nose	B	2 and more
4	Anterior rhinoscopy	B	10 and more
5	Pharyngoscopy with a reflector	B	10 and more
6	Definition of respiratory and olfactory functions of the nose	B	10 and more
7	Anterior tamponade of the nose	B	5 and more
8	Finger examination of the nasopharynx	B	5 and more
9	Direct laryngoscopy	B	10 and more
10	Rinsing of lacunae of the palate tonsils	B	5 and more
11	Taking a smear from the nose and throat for bacteriological and virological study	B	5 and more
12	Coniotomy	D	1 or more (at a training center)
13	Tracheotomy	D	1 or more (at a training center)

Table 18

Practical skills/ competence

№	List of Practical skills/ competence	Skill level	Required number of activities, medical procedures (if quantifiable)
1	Assess the reflex-motor system	B	10 or more
2	Assess the function of cranial nerves	B	10 or more
3	Assess the speech, praxis, gnosis.	B	10 or more
4	Sensitivity assessment	B	10 or more
5	Assess the coordination of movements	B	10 or more
6	Assess the meningeal symptoms	B	10 or more
7	Emergency care for: - meningitis - loss/impairment of consciousness - acute violation of cerebral circulation - hyperthermia - convulsions	B	2 for each condition

Table 19

Course 10. PSYCHOLOGICAL AND MENTAL HEALTH (psychiatry)

Duration: 37 hours / 1,25 credits ECTS

Aim	To master the basics of psychological/mental diagnostics disorders, psychoeducation and psychopharmacology	
I Knowledge	II Skills	
1. Know regulatory documents from	1. Able to conduct counseling patients with	

<p>issues of mental health and medical and social security (orders, clinical guidelines, WHO program - mhGAP).</p> <p>2. Know the classification, algorithm detection and treatment of violations behavior and mental functions in childhood and adolescence.</p> <p>3. Know clinical manifestations, diagnosis, prevention and principles of treatment of neurasthenia, chronic fatigue syndrome, hyperactivity syndrome, psychosomatic disorders, sleep disorders, eating behavior, enuresis.</p> <p>4. Know clinical manifestations, diagnosis and principles of treatment and rehabilitation, route of patients with depressive and anxiety disorders, psychosis, bipolar disorder, acute stress disorder, PTSD; personality disorders (paranoid, schizoid, antisocial, obsessive-compulsive, etc.).</p> <p>5. Know the clinical manifestations, diagnosis, methods of treatment and rehabilitation of patients with dementia.</p> <p>6. Know the symptoms, diagnosis, principles of treatment and rehabilitation, route of patients with addictions.</p> <p>7. Know the clinic and emergency measures assistance to patients with acute mental states (acute psychosis, manic episode, panic attack, suicide, withdrawal syndrome, aggressive behavior, delirium).</p> <p>8. Know the principles of psychoeducation and clinical pharmacology of drugs used in psychiatry.</p>	<p>addictions, mental and psychological problems, determine the treatment plan and route of the patient.</p> <p>2. Able to prescribe outpatient treatment, determine the route of a patient with neurasthenia, vegetative disorders, psychosomatic disorders, sleep disorders, nutrition, enuresis.</p> <p>3. Able to diagnose depressive and anxiety disorders with the help of questionnaires, prescribe a treatment plan and determine the patient's route.</p> <p>4. Able to identify patients with bipolar disorder, PTSD, personality disorders, conduct consultations regarding examination and treatment, determine the patient's route.</p> <p>5. Able to assess the cognitive sphere in patients of various ages, prescribe outpatient treatment and determine the route of a patient with cognitive disorders and dementia.</p> <p>6. Able to conduct motivational counseling of patients with addictions.</p> <p>7. Understand how to provide emergency care for acute mental conditions (acute psychosis, manic episode, panic attack, suicide, withdrawal syndrome, aggressive behavior, delirium).</p> <p>8. Able to monitor the effectiveness and safety of the use of drugs for the treatment of mental disorders.</p>
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Table 20

Practical skills/ competence

№	Practical skills/ competence	Skill level	Required number of activities, medical procedures (if quantifiable)
1	Counseling of patients with psychological and mental, behavioral disorders	C	2 for each issue
2	The use of questionnaires for the diagnosis of anxiety and depressive states	B	5 or more
3	Accounting and reporting documentation and electronic forms	B	20 and more
4	Emergency care for:	B	2 or more for each

<ul style="list-style-type: none"> - acute psychosis - delirium - abstinence syndrome - poisoning with narcotic substances, alcohol - a panic attack 		issue
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Table 21

Course 11. INFECTIOUS DISEASE
Duration 32 hours / 1,05 credits ECTS

Aim	Master the management of patients of all age groups with infectious diseases; to understand the system of anti-epidemic protection of the population and anti-epidemic measures in the focus of infection	
I Knowledge	II Skills	
<p>1. Know regulatory documents on the prevention of infectious diseases, anti-epidemic protection of the population and measures in the focus of infection, the use of individual protective equipment, activities of the dispensary organization of family medicine in the conditions of the COVID-19 pandemic.</p> <p>2. Know the classification of infectious and parasitic diseases, the main methods of their diagnosis; main clinical syndromes (diarrhea, fever, jaundice, exanthema, lymphadenopathy, meningeal syndrome), differential diagnosis and outpatient treatment.</p> <p>3. Know clinical manifestations, diagnosis, prevention and principles of treatment of measles, scarlet fever, rubella, chicken pox, enterovirus infections, poliomyelitis, diphtheria.</p> <p>4. Know clinical manifestations, diagnosis and principles of treatment, route of patients with bacterial/viral infections meningitis/ meningoencephalitis.</p> <p>5. Know clinical manifestations, diagnosis, methods of treatment and prevention viral hepatitis (A, B, C, D, E), leptospirosis.</p> <p>6. Know clinical manifestations, diagnosis, methods of treatment and prevention of HIV infection; HIV-positive route the patient; measures of emergency prevention.</p> <p>7. Know the symptoms, diagnosis, prevention and treatment of the most common parasitic diseases (malaria, amebiasis, balantidiasis, toxoplasmosis, giardiasis) and helminthiasis (nematodes, trematodes, cestodoses)</p> <p>8. Know the symptoms, prevention, diagnosis and outpatient treatment of SARS, in-</p>	<p>1. Able to make a plan and organize anti-epidemic and quarantine measures in outbreaks of infection, during epidemics and emergency situations.</p> <p>2. Able to carry out diagnostics, differential diagnosis, outpatient treatment and determine the route of patients suspected of having an infectious disease, with fever, jaundice, rash, diarrhea, lymphadenopathy.</p> <p>3. Able to carry out diagnostics, differential diagnosis, outpatient treatment of patients with helminthiasis, parasitic diseases, measles, scarlet fever, rubella, chicken pox, enterovirus infections, infectious mononucleosis, herpes infection, diphtheria.</p> <p>4. Able to carry out prevention, diagnosis, draw up a treatment plan and monitor its effectiveness, and determine the route of a patient with viral hepatitis.</p> <p>5. Able to conduct a pretest and post-test counseling of patients who are tested for HIV infection, draw up a management and treatment plan, determine the route of an HIV-positive patient status</p> <p>6. Able to draw up a plan and organize the necessary measures of emergency prevention in case of possible infection of a medical worker with HIV at the workplace.</p> <p>7. Able to plan and carry out observation, prevention, diagnosis and outpatient treatment of Lyme disease.</p> <p>8. Able to draw up an observation plan and outpatient treatment, organize ambulatory monitoring of a patient with a positive PCR for SARS-Cov2.</p> <p>9. Able to prescribe antibacterial, antiviral, antifungal, antiparasitic, anthelmintic drugs and monitor their effectiveness and safety.</p> <p>10. Able to train the population on the prevention of infectious diseases, anti-epidemic and</p>	

<p>fluenza, COVID-19, infectious mononucleosis.</p> <p>9. Know the symptoms, prevention, diagnosis and outpatient treatment of Lyme disease.</p> <p>10. Know the symptoms and emergency measures for patients with hyperthermia, infectious-toxic shock, meningial syndrome, diarrhea, vomiting.</p> <p>11. Know the classification, clinic, anti-epidemic measures, basics treatment and route of a patient with particularly dangerous infections.</p> <p>12. Know clinical pharmacology antibacterial, antiviral, antifungal, anthelmintic, antiparasitic and other drugs used in the treatment of human infections.</p> <p>13. Know the types, classification, mechanism of action and features of the use of vaccines, in particular vaccines against SARS Cov-2.</p>	<p>quarantine measures, the use of individual means protection, vaccination.</p> <p>11. Able to conduct consultations on the prevention of vaccine-controlled infections (vaccination) in all age groups, pregnant women and immunodeficient patients.</p>
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Table 22

Practical skills/ competence

№	List of Practical skills/ competence	Skill level	Required number of activities, medical procedures (if quantifiable)
1	Gather material (blood, feces, urine, bile, mucosal washes membranes of the nasopharynx, etc.) for bacteriological and virological studies	B	5 or more
2	Gather material for bacteriological study in cases of tonsillitis of various etiologies	B	5 or more
3	Carrying out express tests on various infectious diseases	B	10 or more
4	Draw up medical documentation (inpatient card, emergency report, medical history extract, etc.)	B	10 or more
5	Make a plan of preventive and quarantine measures for the most common and particularly dangerous infectious diseases	B	5 or more

Table 23

Course 12. PULMONOLOGY, PHTHISIATRY Duration 38 hours / 1,25 credits ECTS

Aim	Master the outpatient management of patients of all age groups with tuberculosis	
	I Knowledge	II Skills
	1. Know the regulatory and legal framework and medical-technological documents related to the control of tuberculosis	1. Able to conduct an examination, consultation and determine the route patients with suspected TV. 2. Able to organize training of the population,

<p>infection in Ukraine; international and national strategy for the fight against tuberculosis.</p> <p>2. Know the epidemiological situation, etiopathogenesis, pathomorphosis of tuberculosis, risk groups.</p> <p>3. Know the peculiarities of the course of combined infections (HIV and TB, hepatitis and TB); a system for diagnosing tuberculosis, selecting patients for examination, maintaining medical documentation and electronic forms; formulation of the diagnosis.</p> <p>4. Know the diagnosis of latent tuberculosis infection, diagnosis and differential diagnosis of TB of the lungs, respiratory organs, and other organs in adults and children.</p> <p>5. Know the rules of infection control at the level of PMC, vaccine and chemoprophylaxis of TB.</p> <p>6. Know the rules of care for a child born to a mother with tuberculosis.</p> <p>7. Know the organizational and anti-infection work in the focus of tuberculosis infection, case definition, classification.</p> <p>8. Know outpatient models of treatment of tuberculosis patients, documentation management, preventive measures and training of the population and medical workers.</p> <p>9. Know the algorithms for managing patients who are treated on an outpatient basis; patients who interrupted treatment; pregnant, HIV-infected, with concomitant diseases; children and teenagers.</p> <p>10. Know the general principles of treatment of TB, chemoresistant TB, monitoring of effectiveness and adverse events.</p>	<p>medical workers, anti-infection measures in the outpatient clinic and in the focus of tuberculosis infection.</p> <p>3. Able to advise different patients age groups and with comorbid conditions and infections, pregnant women regarding the diagnosis and treatment of TV and to determine route of patients</p> <p>4. Able to monitor the effectiveness and safety of anti-tuberculosis therapy at the PMC level, determine the route of patients.</p>
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Table 24

Practical skills/ competence

№	List of Practical skills/ competence	Skill level	Required number of activities, medical procedures (if quantifiable)
1	Gather sputum for analysis	A	2 and more
2	Quantiferon test	B	2 and more
3	Documentation management	B	2 and more

Table 25

Course 13. DERMATOVENEREOLOGY Duration 32 hours / 1,05 credits ECTS

Aim	Master outpatient management of patients of all age groups with skin, hair, nail problems, venereal diseases	
	I Knowledge	II Skills
	1. Know the anatomy and physiology of the	1. Able to conduct a complete examination of the skin and its appendages and interpret the

<p>skin and its appendages in people of different ages and with pathology.</p> <p>2. Know the differential diagnosis of skin rash (erythematous, hemorrhagic, vesiculo-bullous), skin itching, disorders of pigmentation.</p> <p>3. Know diagnostics, principles treatment and route of the patient with chronic skin diseases (psoriasis, eczema, dermatitis, atopic dermatitis).</p> <p>4. Know differential diagnosis, outpatient treatment, route of a patient with infectious and parasitic skin diseases (pyoderma, acne, rosacea, furuncle, carbuncle, fistula; impetigo; dermatitis).</p> <p>5. Know differential diagnosis, outpatient treatment and route a patient with neoplasms of the skin and subcutaneous tissue (molluscum, milia, acrochondrosis, papilloma, corn, callus, seborrheic keratosis, lipoma, hemangioma, and others).</p> <p>6. Know differential diagnosis, risk factors, prevention, principles of treatment, route of a patient with precancerous conditions (keratoacanthoma, melanoma in situ).</p> <p>7. Know differential diagnosis, risk factors, prevention, principles of treatment of malignant melanomas.</p> <p>8. Know the differential diagnosis, principles of treatment, route of patients with hair and nail problems.</p> <p>9. Know regulatory documents regarding prevention of venereal diseases, classification, prevention and outpatient treatment, route a patient with a venereal disease.</p> <p>10. Know modern medical and non-medical medicinal products that apply for the treatment of dermatological diseases, diseases of nails and hair.</p>	<p>results in patients of all age groups, determine the area of the lesion.</p> <p>2. Able to consult patients with skin rash, skin itching, skin and subcutaneous neoplasms fiber, pigmentation disorders, hair and nail problems, determine the examination plan and route of the patient, prescribe outpatient treatment.</p> <p>3. Able to conduct counseling of patients with suspected/venereal disease, prescribe emergency medicine prevention, determine the patient's route and keep the necessary documentation.</p> <p>4. Able to consult patients with infectious skin diseases, prescribe outpatient treatment and monitor its safety and effectiveness.</p> <p>5. Able to consult patients with precancerous and oncological skin diseases, determine the patient's route.</p>
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Table 26

Practical skills/ competence

№	List of Practical skills/ competence	Skill level	Required number of activities, medical procedures (if quantifiable)
1	Calculate the affected skin area	B	2 and more
2	Examination of the skin	B	10 and more
3	Diascopy, palpation, scraping (grattage)	B	10 and more
4	The method of applying bandages, lotions,	A	5 and more

	dermatological compresses, pastes, shaking mixtures, plasters, varnishes, aerosols		
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Table 27

Course 14. EMERGENCY MEDICAL AID AND PRIMARY PATIENT STABILIZATION

Duration 38 hours / 1,25 credits ECTS

Aim	Master the provision of emergency medical care to patients of all age groups		
	I Knowledge	II Skills	
	<ol style="list-style-type: none"> 1. Know the definitions and symptoms terminal states, sudden death, clinical death, shock states and poisoning. 2. Know the algorithms of provision emergency medical care and initial stabilization of the patient in case of sudden cardiac arrest, respiratory arrest coronary death; acute heart / respiratory failure, mechanical asphyxiation, drowning, electric shock, sun and heat stroke, various types of shock, coma, disorders consciousness, acute poisonings, bleeding. 3. Know the methods of conducting a cardiac examination resuscitation, restoration of patency upper respiratory tract, tracheal intubation, application laryngeal mask, auxiliary lung ventilation; vascular accesses, anti-shock measures. 4. Know clinical pharmacology and features of the use of drugs used in emergency care, routes of administration, features of infusion therapy for shocks. 5. Know the basics of medical sorting of victims and wounded. 6. Know the principles of mechanical ventilation operation. 	<ol style="list-style-type: none"> 1. Able to provide emergency aid at basic emergency conditions, shock, comatose states, poisoning, bleeding patients of different age groups. 2. Able to carry out medical triage of the wounded and victims. 3. Able to organize assistance at the site of an accident. 	

Table 28

Practical skills/ competence

№	List of Practical skills/ competence	Skill level	Required number of activities, medical procedures (if quantifiable)
1	Methods of restoring patency of the upper respiratory tract	B	5 and more
2	Tracheal intubation	C	2 and more
3	Use of a laryngeal mask	C	5 and more (at a training center)
4	Application of S-shaped laryngeal tubes	B	5 and more (at a training center)

5	Defibrillation	B	5 and more (at a training center)
6	Cardiopulmonary resuscitation of children and adults	B	5 and more (at a training center)
7	Coniotomy	C	5 and more (at a training center)
8	Tracheotomy	C	2 and more (at a training center)
9	Emergency care for:		
	collapse	B	2 and more
	different forms of shock	B	2 and more
	comatose states	B	2 and more
	acute poisonings	B	2 and more
	electric shocks, lightning strikes	B	2 and more
	burns and frostbite	B	2 and more
	bites of snakes, insects, animals	B	2 and more
	drowning and suffocation	B	2 and more
	bleeding	B	2 and more
	thromboembolism of the pulmonary artery and main arteries of the limbs	B	1 and more
	acute renal failure	C	1 and more
	acute liver failure	C	1 and more
	seizures	B	1 and more
	trauma	B	1 and more

Table 29

Course 15. ANESTHESIOLOGY AND CPR
Duration 60 hours / 2 credits ECTS

Aim	During their training, trainees should acquire clinical knowledge of medical and surgical skills in the management of critically ill patients and acquire and master the clinical skills and abilities to perform anesthetic and resuscitation procedures appropriately and safely.	
I Knowledge		II Skills
1. Know aspects of monitoring and working with equipment, including respiratory therapy and hemofiltration. 2. Know and use the appropriate criteria for the severity of life-threatening conditions. 3. Know the methods of conducting a cardiac examination, resuscitation, restoration of patency upper respiratory tract, tracheal intubation, application laryngeal mask, auxiliary lung ventilation; vascular accesses, anti-shock measures. 4. Know clinical pharmacology and features of the use of drugs used in emergency care, routes of administration, features of infusion therapy for shocks. 5. Know the basics of medical sorting of		1. Able to provide emergency aid at basic emergency conditions, shock, comatose states, poisoning, bleeding in patients of different age groups. 2. Treat patients in the department of intensive care. 3. Able to outline the main principles of medical care, including pediatric patients; understand medical and surgical disorders that require specific treatment in the intensive care unit and issues related to the transfer of patients for specialized care, for example, in cardiac surgery hospitals, EKMO-centers etc.

victims and wounded. 6. Know the principles of ventilator operation 7. Basic and specific skills in general and regional anesthesia in planned and emergency situations, vascular accesses, especially when establishing central venous and arterial lines.	
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Table 30

Practical skills/ competence

№	List of Practical skills/ competence	Skill level	Required number of activities, medical procedures (if quantifiable)
1	Examination of the patient before anesthesia and prescription of drugs for premedication	B	5 and more
2	Venipuncture and installation intravenous drip	B	5 and more
3	Laryngoscopy and endotracheal intubation	C	10 and more
4	Lumbar puncture, spinal anesthesia	C	5 and more
5	Observation of the patient during anesthesia and in the postoperative period	B	10 and more
6	Entering anesthesia records	B	10 and more
7	Cardiopulmonary examination resuscitation, including detection of cardiac arrest	B	10 and more
8	Anesthesia for minor and major surgical interventions	B	10 and more
9	Counseling on different types of anesthesia	B	10 and more
10	Detection of complications postoperative period and help in their treatment	B	10 and more

Table 31

Course 16. PHYSICAL AND REHABILITATION MEDICINE

Duration 72 hours / 2,4 credits ECTS

Aim	Master the provision of rehabilitation care to patients of all age groups	
	I Knowledge	II Skills
	<p>1. Know the problems associated with violation of the structure and functions, limiting the patient's activity and participation, the influence of contextual factors.</p> <p>2. Know the work of a physical therapist and of rehabilitation medicine (FRM) at multidisciplinary rehabilitation team as a member or leader.</p> <p>3. Know the rehabilitation program interventions, formulate goals, design, discuss and explain a program of interventions or</p>	<p>1. Able to in accordance with the International classification of functioning, limitations of vital activity and health (ICF) identify problems related to violation of structure and functions, limitation of the patient's activity and participation, the influence of contextual factors.</p> <p>2. Able to work in multidisciplinary rehabilitation to the team as a team member.</p> <p>3. Able to evaluate the results the use of rehabilitation management, control the duration and intensity of therapeutic measures to ensure their appropriateness to the condition</p>

<p>components of an individualized rehabilitation program based on evidence-based practices.</p> <p>4. Know rehabilitation management to ensure improvement of health status.</p> <p>5. Know the methods of rehabilitation interventions for people of different ages, nosological and professional groups with complex progressive and multisystem disorders.</p>	<p>health, functional capabilities of the patient and goals of physical rehabilitation.</p>
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Table 32

Practical skills/ competence

№	List of Practical skills/ competence	Skill level	Required number of activities, medical procedures (if quantifiable)
1	Assessment of functioning, functional independence and activities of daily life.	B	5
2	Anthropometry: determination of degree fat deposits, body fat mass, body length (sitting and standing) and limbs, body weight, chest circumference and its excursion, vital capacity of the lungs (spirometry).	B	5
3	Assessment of walking according to kinematic special parameters	C	2
4	Assessment of mental status (Montreal rating scale of cognitive functions (MoSA), Mini - Mental State Examination (MMSE))	B	5
5	Assessment and interpretation of instrumental and laboratory results methods of research of the musculoskeletal system: radiography, MRI, computer tomography, ultrasound research. Be able to determine indications and contraindications for prescribing methods.	C	5
6	The ability, in accordance with the ICF, to determine problems associated with a violation of the structure and functions, limitation of the patient's activity and participation, the influence of contextual factors	C	5
7	Ability to work in multidisciplinary rehabilitation team as a team member or team leader	A	5

Table 33

Aim	Master the skills of ascertaining the fact of the occurrence of death, differential diagnosis of injuries as a result of the influence of various environmental factors, illegal actions regarding the health of a person, maintaining relevant medical and legal documentation in compliance with the basics international medical law	
	I Knowledge	II Skills
	<ol style="list-style-type: none"> 1. Know the peculiarities of the development of early and late cadaveric changes. 2. Know morphological features of bodily injuries caused by blunt, sharp objects, firearms, various physical factors (mechanical asphyxia, extreme temperatures, technical and atmospheric electricity, changed barometric pressure, ionizing radiation). 3. Know the peculiarities of the influence of various chemical agents on the human body. 4. Know the algorithm for determining the age of a person; peculiarities of examination of the person in cases of sexual violence. 5. Know the peculiarities of documentation and certification in cases of various injuries. 6. Know the basics of working in emergencies cases and mass disasters. 7. Know ethical and deontological norms of professional conduct, bioethics and international medical law. 	<ol style="list-style-type: none"> 1. Able to determine the stages of development absolute early signs of death and late cadaveric changes, ascertain the fact of the onset of death and determine the time of its onset. 2. Able to differentiate bodily injuries depending on the action of the traumatic factor, assess the danger to life at the time of their occurrence. 3. Able to carry out a differential diagnosis in case of poisoning with various chemical factors and assess health disorders. 4. Able to certify medical-legal cases in case of coming of age and in case of sexual violence. 5. Able to certify injuries and fill out the relevant medical documentation in accordance with the current regulatory documents. 6. Able to work in a multidisciplinary team in cases of emergencies and mass disasters. 7. Able to establish communication and cooperate with the police and relevant departments of health care within the limits of professional competence.

Table 34

Practical skills/ competence

№	List of Practical skills/ competence	Skill level	Required number of activities, medical procedures (if quantifiable)
1	Documentation and certification of injuries	B	10 and more
2	Declaration of death	B	5 and more
3	Handling legal documentation in case of emergencies	B	1 and more
4	Medical and legal certification cases (estimation of age, sexual violence, etc.)	B	5 and more
5	Establishing a connection in medical legal cases with the police, relevant security departments health etc.	B	5 and more

Table 35

Course 18. PUBLIC HEALTH

Duration 90 hours / 3 credits ECTS

Aim	Master strategic planning and implementation of new mechanisms, management tools, methods of working with people in crisis management conditions in the public health system.	
	I Knowledge	II Skills
	1. Know the basic demographics and	1. Able to determine priorities of public

<p>epidemiological indicators, values and trends of changes in the main determinants affecting health in terms of different population groups in Ukraine, the European region and the world, apply basic concepts and concepts of epidemiology and statistics in planning, conducting and interpretation of research results</p> <p>2. Know the main risks and plan appropriate actions in case of emergencies in the field of public health.</p> <p>3. Know the method of conducting economic analysis of efficiency developed procedures, interventions, strategies and policies in the field public health.</p> <p>4. Know management functions and the organization of service provision in the field of public health.</p> <p>5. Know the organization of control over the quality of provided services in the field of public health at the appropriate level.</p> <p>6. Know modern mechanisms design, development, implementation and support of software and information systems using modern programming languages, standards and technologies (desktop, mobile, web).</p> <p>7. Know screening programs in general medical practice, national and international standards, the main directions of implementation in the current system of ensuring the quality of medical care.</p> <p>8. Know the theoretical foundations of personnel management of the organization.</p> <p>9. Know the problems of AIDS, viral hepatitis, tuberculosis and domestic violence.</p> <p>10. Know the features of application main groups of drugs used for treatment patients with the most common non-infectious diseases.</p>	<p>health, to assess the needs of the health care sector, propose science-based interventions and develop relevant conclusions and strategies.</p> <p>2. Able to formulate conclusions, develop forecasts and analyze the impact of various determinants on the health of the population, determine the health needs of various population groups, based on information obtained from the systems epidemiological surveillance.</p> <p>3. Able to define and apply basic principles and approaches regarding prevention and control of physical, chemical, biological, radiation and nuclear threats to the health and safety of the population.</p> <p>4. Able to identify and analyze risks related to the impact on health population determinants of the environment (physical, radiation, chemical, biological and industrial) and organize appropriate measures aimed at protecting the health of the population.</p> <p>5. Able to develop prevention measures (primary, secondary and tertiary) diseases and promote their implementation in practice.</p> <p>6. Able to monitor and provide evaluation, data quality, data use and public health information.</p> <p>7. Able to use culture management as a component management.</p> <p>8. Able to organize an emergency medical assistance to the population in case of emergencies.</p> <p>9. Able to apply the organizational and legal principles of the legislation of Ukraine regarding the prevention and counteraction of domestic violence.</p> <p>10. Able to apply basic groups medicines used to treat patients with the most common non-communicable diseases.</p>
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Table 36

Practical skills/ competence

№	List of Practical skills/ competence	Skill level	Required number of activities, medical procedures (if quantifiable)
1.	Apply the basics of strategic planning in the field of health care. The mechanism of implementation of the state policy on the manage-	B	5 and more

	ment of the health care system in Ukraine. Decentralization of management of medical facilities.		
2.	Use international medical and social laws. Apply the International Convention on Quarantine Diseases. Organization of preventive and anti-epidemic measures at the community level. Organization of preventive and anti-epidemic measures in a health care institution.	B	5 and more
3.	Organize the management apparatus as a component part of the system. Use the technology of development and management decision-making.	B	5 and more
4.	Be able to monitor and provide evaluation, data quality, data use and public health information.	B	5 and more
5.	Know the system of human rights in the field of health care.	B	5 and more
6.	Implement the organization's quality management system. National and international standards. The main directions of implementation in the current system of ensuring the quality of medical care.	B	5 and more
7.	To implement the theoretical foundations of personnel management of the organization.	B	5 and more
8.	Use management culture as a component of management.	B	5 and more
9.	Organization of examination of temporary incapacity for work in health care facilities, palliative and hospice care.	B	5 and more
10.	Identify the problems of AIDS and viral hepatitis.	B	5 and more
11.	Identify the problems of tuberculosis.	B	5 and more
12.	Organize emergency medical assistance to the population in case of emergencies.	B	5 and more
13.	Implement organizational and legal issues in the work of medical institutions in emergency situations, including combat operations.	B	5 and more
14.	Management of the quality of medical care as a mechanism for increasing its effectiveness. Tools of state management of the quality of medical care (emergency medical care). Logistics of emergency medical assistance to the population.	B	5 and more
15.	Implement rehabilitation in health care institutions: legal, organizational aspects, etc.	B	5 and more

**VII. LIST OF PRACTICAL SKILLS,
which a person who has passed the specialization program
"General medical practice" should be possessed**

Table 1

№	List of practical skills/ competencies for mastering the sections of the program	Skill level	Required number of activities, medical procedures (if quantifiable)
1	Adult health		
1	Make a plan and conduct training and counseling of patients with the most common chronic conditions non-infectious diseases and risk factors for their development (teaching for controlled self-management of bronchial asthma, diabetes school, teaching patients with CHF, risk factors for cardiovascular diseases); on prevention of vaccine-controlled infections; pre-test and post-test counseling to determine HIV infection); counseling of persons with intellectual disabilities	B	2 and more regarding each non-infectious disease
2	Coding according to ICPC classifications, ICD-10 and maintaining electronic forms	B	100-200
3	Conduct motivational counseling to support a healthy lifestyle, smoking cessation, healthy diet, physical activity	B	100 and more
4	Interpretation of the results of laboratory and instrumental methods studies in adults: - complete blood count; - biochemical indicators of blood; - acute-phase indicators of inflammation; - lipidograms; - blood clotting system; - tests to detect diabetes; - tests to detect SARS-Cov-2; - general analysis of urine; - sputum; - stool test, coprogram; - gastric secretions; - duodenal contents; - biological fluids of the pericardium, pleura, abdominal cavity; - cytological; - secretions of female and male genital organs; - hormones;	B	100 and more in total

	<ul style="list-style-type: none"> - serological; - immunological; - allergy tests; - X-ray; - endoscopy; - electrocardiography; - ultrasound [incl. echocardiography]; - tests with dosed physical loads (cycling ergometry, treadmill); - Holter ECG and blood pressure monitoring; - functions of external breathing; - blood gases and acid-base balance 		
5	Blood pressure measuring on upper and lower limbs	A	100 and more
6	Recording and interpretation of ECG in adults	A	50-100
7	Methodology and assessment of the results of a 6-minute walk test	B	50 and more
8	Use of inhalers and nebulizers	A	40 and more
9	Pulse oximeter	A	100 and more
10	Peak flowmetry	A	40 and more
11	Conducting and interpreting results of rapid tests, in particular for SARS-Cov2, troponin level; determination of blood glucose with a glucometer; urine ketones and glucose and others	A	50-100
12	Emergency care for:		
	- acute coronary syndrome	B	10 and more
	- broncho-obstructive syndrome	B	20 and more
	- acute heart rhythm disturbances	B	20 and more
	- hypertensive crises	B	25 and more
	- allergic reactions	B	10 and more
	- hyperthermia	B	20 and more
	- hypo-/ hyperglycemia	B	10 and more
	- thyrotoxic crisis	B	1 and more
	- spontaneous pneumothorax	B	1 and more
	- pulmonary edema	B	3 and more
	- thromboembolism of the pulmonary artery and main arteries of the limbs	B	1 and more
	- acute kidney injury	C	1 and more
	- acute liver failure	C	1 and more
	- acute adrenal failure	B	3 and more
	- renal, biliary colic	B	5 and more
13	Methods of restoring patency of the upper respiratory tract	A	10 and more
14	Intubation of the trachea	B	1 and more (including at a training center)

15	Use of a laryngeal mask	B	2 and more (including at a training center)
16	Use of a S-shaped laryngeal tube	B	2 and more (including at a training center)
17	Defibrillation	D	2 and more (including at a training center)
18	Cardiopulmonary resuscitation of adults	D	5 and more (including at a training center)
19	Coniotomy	B	1 and more (including at a training center)
20	Tracheotomy	B	1 and more (at a training center)
2	Children's health		
1	<p>Interpretation of the results of laboratory and instrumental exams in children:</p> <ul style="list-style-type: none"> - complete blood count; - biochemical indicators of blood; - blood clotting system; - tests to detect diabetes; - tests to detect SARS-Cov-2; - general urine analysis, urine analysis according to Nechiporenko, Zimnytskyi; - sputum, smear-imprint of the nasal mucosa; - poop, co-programs; - gastric secretions; - duodenal contents; <p>biological fluids of the pericardium, pleura, abdominal cavity;</p> <p>cytology;</p> <ul style="list-style-type: none"> - hormones; - serological; - immunological; - allergy tests; - X-ray; - endoscopy; - ultrasonic; - functions of external breathing; - results of bacteriological and virological cultures - blood gases and acid-base balance 	B	Each time when discussing a clinical case (100 and more regarding each test)
2	Measurement of blood pressure on the upper and lower extremities, using a set of cuffs for children	A	50 and more
3	Recording and decoding of ECG in children	A	30 and more
4	Use of inhalers and nebulizers	A	20 and more
5	Pulse oximeter	A	20 and more
6	Peak flowmetry	A	20 and more

7	Conducting and interpreting results of rapid tests, in particular for SARS-Cov2, troponin level; determination of blood glucose with a glucometer; urine ketones and glucose and others	A	25 and more
8	Prescribe rational nutrition taking into account the type of feeding (natural, artificial, mixed) for children of the 1st year of life	A	50 and more
9	Care of the umbilical cord, skin condition of the newborn	A	50 and more
10	Technique of early breast latching of a newborn	A	50 and more
11	Evaluate the latching efficiency of the newborn	A	50 and more
12	Establishing “skin-to-skin” contact	A	10 and more
13	Assessment of physical and psycho-emotional development of the infant	B	50 and more
14	Assessment of physical and mental development of a child from 1 year to 3 years	B	50 and more
15	Detecting Ortolani and Barlow symptoms to diagnose dysplasia of the hip joints	B	50 and more
16	Vaccination calendar in Ukraine. Drawing up an individual plan of vaccinations for a child who is vaccinated with violation of the vaccination calendar	A	50 and more
17	Methods of restoring patency upper respiratory tract	A	10 and more
18	Use of a laryngeal mask	B	1 and more (at a training center)
19	Use of an S-shaped laryngeal tube	B	2 and more (at a training center)
20	Defibrillation	B	1 and more (at a training center)
21	Cardiopulmonary resuscitation of children	B	2 (at a training center)
22	Vaccination calendar in Ukraine. Drawing up an individual plan of vaccinations for a child who is vaccinated with violation of the vaccination calendar	B	2 and more (at a training center)
3	Women’s health		
1	Interpretation of the results of the main laboratory and instrumental methods of examination in pregnant women	B	50 and more
2	Interpretation of the results of allocations female genitalia	B	25 and more

3	Make a plan for maintaining a physiological pregnancy	B	10 and more
4	Conducting an express pregnancy test	A	10 and more
5	Measurement of the standing height of the bottom of the uterus, the circumference of the abdomen	B	10 and more
6	Determine the term of pregnancy and the term of delivery by the dates of the last menstruation and the first movement of the fetus	B	10 and more
7	Assessment of the condition of the fetus (auscultation of the heartbeat, conducting a gravigram)	B	10 and more
8	Gynecological examination. Bimanual examination	B	10 and more
9	Gynecological examination using a speculum	B	10 and more
10	Collection material from the vagina for bacteriological study	B	20 and more
11	Collection of material from the cervix for cytological examination	B	20 and more
12	Examination and palpation of the breasts	A	20 and more
13	Family planning counseling	B	10 and more
14	Application of various methods contraception	B	10 and more
15	Consulting regarding prevention of sexually transmitted infections	B	10 and more
4	Men`s health		
1	Interpretation of test results of the discharge from male genitalia	B	10 and more
2	Digital rectal exam	B	10 and more
3	Bladder catheterization using an elastic catheter in adults and children	B	5 and more (including at a training center)
5	Management of patients with surgical problems		
1	Primary surgical treatment of wounds	B	20 and more
2	Care and treatment of bedsores, trophic ulcers	B	10 and more
3	Treatment of the burn surface	B	10 and more
4	Applying and removing stitches	B	10 and more
5	Opening of superficial abscesses of the skin and subcutaneous tissues	B	10 and more
6	Stopping external bleeding (applying a tourniquet, a tight bandage, squeezing the arteries)	B	10 and more
7	Administration of local anesthesia (infiltration, conductive and novocaine blockades)	B	5 and more
8	Gastric lavage	B	10 and more

9	Digital examination of the rectum	B	10 and more
6	Injuries and developmental disorders		
1	Transport immobilization	B	5 and more
2	Cervical collar application	B	5 and more
7	Ophthalmology		
1	External examination of the eyelids and conjunctiva	B	20 and more
2	Assess visual acuity using optical tables	B	20 and more
3	Assess the field of vision using a set of lenses	B	20 and more
4	Assess color perception	B	20 and more
5	Measurement and assessment of intraocular pressure by palpation method and tonometry method, including transpalpebral	B	20 and more
6	Examination of the fundus by direct ophthalmoscopy	B	20 and more
7	Therapeutic manipulations: - washing of the conjunctival cavity and cornea - apply drops and place ointment in the conjunctival sac - removal of superficial foreign bodies from the conjunctiva	B B B	10 and more 20 and more 10 and more
8	Otolaryngology		
1	Examination of the external ear and tympanic membrane with a reflector and an otoscope	B	20 and more
2	Assessment of hearing acuity: spoken speech and whispered speech	B	20 and more
3	Removal of an uncomplicated foreign body from the ear, throat, nose	B	10 and more
4	Anterior rhinoscopy	B	20 and more
5	Pharyngoscopy with a reflector	B	20 and more
6	Definition of respiratory and olfactory functions of the nose	B	20 and more
7	Anterior tamponade of the nose	B	10 and more
8	Finger examination of the nasopharynx	B	10 and more
9	Direct laryngoscopy	B	20 and more
10	Rinsing of lacunae of the palate tonsils	B	10 and more
11	Taking a smear from the nose and throat for bacteriological and virological study	B	20 and more
12	Coniotomy	D	1 and more (at a training center)
13	Tracheotomy	D	1 and more (at a training center)
9	Neurology		
1	Assess the reflex-motor system	C	50 and more

2	Assess the function of cranial nerves	C	50 and more
3	Assess the speech, praxis, gnosis.	C	50 and more
4	Sensitivity assessment	C	50 and more
5	Assess the coordination of movements	C	50 and more
6	Assess the meningeal symptoms	C	50 and more
7	Emergency care for: - meningitis - loss/impairment of consciousness - acute violation of cerebral circulation - hyperthermia - convulsions	C	50 and more
10	Psychological and mental health (psychiatry)		
1	Counseling of patients with psychological and mental, behavioral disorders	C	10 and more regarding each issue
2	The use of questionnaires for the diagnosis of anxiety and depressive states	B	20 and more
3	Accounting and reporting documentation and electronic forms	B	20 and more
4	Emergency care for: - acute psychosis - delirium - abstinence syndrome - poisoning with narcotic substances, alcohol - a panic attack	B	5 and more regarding each issue
11	Infectious disease		
1	Gather material (blood, feces, urine, bile, mucosal washes membranes of the nasopharynx, etc.) for bacteriological and virological studies	B	5 and more
2	Gather material for bacteriological study in cases of tonsillitis of various etiologies	B	5 and more
3	Carrying out express tests on various infectious diseases	B	10 and more
4	Draw up medical documentation (inpatient card, emergency report, medical history extract, etc.)	B	10 and more
5	Make a plan of preventive and quarantine measures for the most common and particularly dangerous infectious diseases	B	10 and more
12	Pulmonology, phthisiatry		
1	Gather sputum for analysis	A	20 and more
2	Quantiferon test	B	20 and more
3	Documentation management	B	20 and more
13	Dermatovenereology		
1	Calculate the affected skin area	B	10 and more
2	Examination of the skin	B	10 and more

3	Diascopy, palpation, scraping (grattage)	B	10 and more
4	The method of applying bandages, lotions, dermatological compresses, pastes, shaking mixtures, plasters, varnishes, aerosols	A	5 and more
14	Emergency medical aid and primary patient stabilization		
1	Methods of restoring patency of the upper respiratory tract	B	10 and more
2	Tracheal intubation	C	B 10 and more (including at a training center)
3	Use of a laryngeal mask	C	10 and more (including at a training center)
4	Application of S-shaped laryngeal tubes	B	10 and more (including at a training center)
5	Defibrillation	B	10 and more (including at a training center)
6	Cardiopulmonary resuscitation of children and adults	B	10 and more (including at a training center)
7	Coniotomy	C	2 and more (including at a training center)
8	Tracheotomy	C	2 and more (including at a training center)
9	Emergency care for:		
	collapse	B	5 and more
	different forms of shock	B	2 and more
	comatose states	B	5 and more
	acute poisonings	B	5 and more
	electric shocks, lightning strikes	B	2 and more
	burns and frostbite	B	5 and more
	bites of snakes, insects, animals	B	5 and more
	drowning and suffocation	B	1 and more
	bleeding	B	2 and more
	thromboembolism of the pulmonary artery and main arteries of the limbs	B	2 and more
	acute renal failure	C	1 and more
	acute liver failure	C	1 and more
	seizures	B	2 and more
	trauma	B	2 and more
15	Anesthesiology and CPR		

1	Examination of the patient before anesthesia and prescription of drugs for pre-medication	B	5 and more
2	Venipuncture and installation intravenous drip	B	5 and more
3	Laryngoscopy and endotracheal intubation	C	10 and more
4	Lumbar puncture, spinal anesthesia	C	5 and more
5	Observation of the patient during anesthesia and in the postoperative period	B	10 and more
6	Entering anesthesia records	B	10 and more
7	Cardiopulmonary examination resuscitation, including detection of cardiac arrest	B	10 and more
8	Anesthesia for minor and major surgical interventions	B	10 and more
9	Counseling on different types of anesthesia	B	10 and more
10	Detection of complications postoperative period and help in their treatment	B	10 and more
16	Physical and rehabilitation medicine		
1	Assessment of functioning, functional independence and activities of daily life.	B	5 and more
2	Anthropometry: determination of degree fat deposits, body fat mass, body length (sitting and standing) and limbs, body weight, chest circumference and its excursion, vital capacity of the lungs (spirometry).	B	5 and more
3	Assessment of walking according to kinematic special parameters	C	2 and more
4	Methods of prescribing physical exercises	B	5 and more
5	Assessment and interpretation of instrumental and laboratory results methods of research of the musculoskeletal system: radiography, MRI, computer tomography, ultrasound research. Be able to determine indications and contraindications for prescribing methods.	C	5 and more
6	The ability, in accordance with the ICF, to determine problems associated with a violation of the structure and functions, limitation of the patient's activity and participation, the influence of contextual factors	C	5 and more
7	Ability to work in multidisciplinary rehabilitation team as a team member or team leader	A	5 and more

8	The ability to evaluate received results during examination and establish clinical and rehabilitation diagnosis of the patient according to the ICF	A	2 and more
9	Ability to evaluate results the use of rehabilitation management, control duration and intensity therapeutic measures for ensuring their compliance with the state of health	B	5 and more
17	Forensic medicine and toxicology		
1	Documentation and certification of injuries	B	10 and more
2	Declaration of death	B	5 and more
3	Handling legal documentation in case of emergencies	B	1 and more
4	Medical and legal certification cases (estimation of age, sexual violence, etc.)	B	5 and more
5	Establishing a connection in medical legal cases with the police, relevant security departments health etc.	B	5 and more
18	Public health		
1	Apply the basics of strategic planning in the field of health care. The mechanism of implementation of the state policy on the management of the health care system in Ukraine. Decentralization of management of medical facilities.	B	5 and more
2	Use international medical and social laws. Apply the International Convention on Quarantine Diseases. Organization of preventive and anti-epidemic measures at the community level. Organization of preventive and anti-epidemic measures in a health care institution.	B	5 and more
3	Organize the management apparatus as a component part of the system. Use the technology of development and management decision-making.	B	5 and more
4	Be able to monitor and provide evaluation, data quality, data use and public health information.	B	5 and more
5	Know the system of human rights in the field of health care.	B	5 and more
6	Implement the organization's quality management system. National and international standards. The main directions of implementation in the current system of ensuring the quality of medical care.	B	5 and more

7	To implement the theoretical foundations of personnel management of the organization.	B	5 and more
8	Use management culture as a component of management.	B	5 and more
9	Organization of examination of temporary incapacity for work in health care facilities, palliative and hospice care.	B	5 and more
10	Identify the problems of AIDS and viral hepatitis.	B	5 and more
11	Identify the problems of tuberculosis.	B	5 and more
12	Organize emergency medical assistance to the population in case of emergencies.	B	5 and more
13	Implement organizational and legal issues in the work of medical institutions in emergency situations, including combat operations.	B	5 and more
14	Management of the quality of medical care as a mechanism for increasing its effectiveness. Tools of state management of the quality of medical care (emergency medical care). Logistics of emergency medical assistance to the population.	B	5 and more
19	Optional course		
	19.1 Instrumental methods of examination of a surgical patient in general medical practice		
1	Ultrasonography of the vessels of the lower limbs	B	2 and more
2	Digital rectal exam	B	2 and more
3	Rheovasography	B	2 and more
4	Anoscopy	B	2 and more
5	Capillaroscopy	B	2 and more
6	Fibrocolonoscopy	B	2 and more
7	Rectomanoscopy	B	2 and more
8	Puncture of the abdominal cavity	B	2 and more
	19.2 Instrumental diagnosis of a therapeutic patient in general medical practice (ECG, ultrasound, diagnosis of the most common syndromes)		
1	Ultrasonographic examination organs of the abdominal cavity and retroperitoneal space	B	2 and more
2	CT scan of organs of the abdominal cavity and retroperitoneal space	B	2 and more
3	ECG registration and analysis	B	2 and more
4	Registration and analysis of Holter ECG monitoring	B	2 and more

5	Identification of the main rhythms on the ECG, signs of ACS	B	2 and more
	Interpretation of ultrasound study of joints	B	2 and more
6	Ultrasound examination of abdominal organs	B	2 and more
7	Ultrasound examination of the kidneys	B	2 and more
8	Evaluation of the data of visual methods of research of internal organs (radiological, ultrasonographic, CT, MRI, scintigraphy)	B	2 and more
	19.3 Emergency conditions in children in general medical practice (diagnosis of "red flags", emergency care)		
1	Care for the umbilical stump and umbilical wound of the child	B	2 and more
2	Catheterization of the umbilical vein	B	2 and more
3	Techniques for active cleaning of the respiratory tract	B	2 and more
4	Closed heart massage	B	2 and more
5	Carrying out ventilation using a bag, mask and endotracheal tube	B	2 and more
6	Stabilization of a premature newborn at birth	B	2 and more
7	Conducting medicinal inhalations means using a nebulizer and different types of inhalers	B	2 and more
8	Providing emergency care for HUS and acute renal failure	B	2 and more

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