

**MINISTRY OF HEALTH OF UKRAINE  
POLTAVA STATE MEDICAL UNIVERSITY**



**EDUCATIONAL AND  
PROFESSIONAL PROGRAMME**

**Paramedic**

**the first (Bachelor's) level of higher education**

**Speciality 223 Nursing**

**Field of Study 22 Health**

**Programme Subject Area: 223.02. Emergency Medicine**

**Educational Qualification: Bachelor of Nursing**

**Professional Qualification: Paramedic**

**Poltava 2024**

**MINISTRY OF HEALTH OF UKRAINE  
POLTAVA STATE MEDICAL UNIVERSITY**



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APPROVED

By the Academic Council of the Ukrainian Medical  
Stomatological Academy as of 06.03.2019, Minutes  
No.7

Educational and professional programme  
comes into effect on 01 September 2019, the Order of  
the Rector of the Academy as of 30.08.2019 No.130

**Poltava 2024**

**ЛИСТ ПОГОДЖЕННЯ**  
**ОСВІТНЬО-ПРОФЕСІЙНОЇ ПРОГРАМИ**

**Погоджено**

Начальник навчального відділу

д.м.н., професор \_\_\_\_\_

«16» квітня 2024р.



Іван СТАРЧЕНКО

Директор інституту в складі закладу

вищої освіти Навчально-наукового

медичного інституту \_\_\_\_\_

«16» квітня 2024р.



Жанна КУНДІЙ

**Освітня програма обговорена та схвалена на засіданнях:**

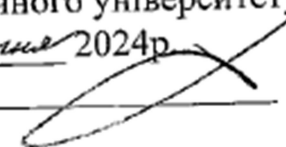
Ради із забезпечення якості вищої освіти й освітньої діяльності

Полтавського державного медичного університету

протокол № 4 від «15» квітня 2024р.

Голова ради д.м.н., професор \_\_\_\_\_

«15» 04 2024р.

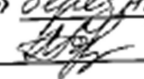


Валентин ДВОРНИК

кафедри медицини катастроф та військової медицини ПДМУ

Протокол № 15 від «27» березня 2024р.

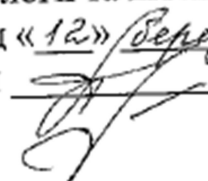
Завідувачка кафедри \_\_\_\_\_ к.м.н., доцент Людмила ГОРДІЄНКО



кафедри анестезіології та інтенсивної терапії ПДМУ

Протокол № 6 від «12» березня 2024р.

Завідувач кафедри \_\_\_\_\_ д.м.н., професор Костянтин ТАРАСЕНКО



## PREFACE

The educational and professional program Paramedic of the first (bachelor) level of higher education, specialty 223 Nursing, field of knowledge 22 Health care, specialization: 223.02 Emergency medicine, educational qualification: bachelor of nursing, professional qualification: paramedic was developed in accordance with the Laws of Ukraine "On Education" and "About higher education", Standard of higher education in the specialty 223 Nursing for the first (bachelor) level of higher education (order of the Ministry of Education and Culture of Ukraine dated 05.12.2018 No. 1344 "On approval of the standard of higher education in the specialty 223 Nursing for the first (bachelor) level of higher education" ), Resolutions of the CMU dated November 23, 2011. No. 1341 "On the approval of the National Framework of Qualifications" with amendments and additions, Resolution of the CMU of April 29, 2015. No. 266 "On approval of the list of fields of knowledge and specialties for which higher education applicants are trained" with changes and additions, Resolution of the CMU dated March 28, 2018. No. 334 "On approval of the Regulation on the system of continuous professional development of specialists in the field of health care", Resolution of the CMU dated 12.30.2015. No. 1187 "On approval of the Licensing conditions for conducting educational activities," with changes introduced in accordance with the Resolution of the CMU No. 180 dated 03.03.2020, Standards and recommendations on quality assurance of higher education in the European area of higher education (ESG-2015), National Strategy on creation of a barrier-free space in Ukraine for the period until 2030, the Concept of the development of digital competences, the Concept of the development of electronic health care, the Statute of the Poltava State Medical University, the Regulation on the organization of the educational process at the Poltava State Medical University and other current regulatory documents.

The educational and professional programme is a regulatory document that defines the prerequisites for study within the programme profile of the educational and professional programme, the list of educational components of the programme and their logical sequence, the number of ECTS credits required for the implementation of this programme, the form of attestation, the list of general and special (professional) competences.

## **WORKING GROUP OF THE PROGRAM**

### **HEAD:**

Liudmyla HORDIENKO – Guarantor of the EPP, PhD, Associate Prof, Head of the Accident and Military Medicine at PSMU;

### **Members of the working group:**

Kostyantyn TARASENKO - doctor of medical sciences, professor, head of the department of anesthesiology and intensive care of the State Medical University;

Ihor PRATSKO - doctor of the highest category of the field brigade of the CP "Poltava Regional Center of Emergency Medical Aid and Disaster Medicine" of the Poltava Regional Council;

Svitlana TSVIRENKO – candidate of medical sciences, associate professor, head of the Department of Pediatrics No. 1 with neonatology;

Zhanna KUNDII – PhD in Pedagogical Sciences, teacher-methodologist, director of the institute as part of the higher education institution of the Educational and Scientific Medical Institute of PSMU;

Karina TREMBACH is a 2nd year student of higher education majoring in 223 Nursing OPP Paramedic.

### **Reviews and feedback from stakeholders:**

Viktor SHATYLO - Rector of the Zhytomyr Medical Institute, Doctor of Medical Sciences, Professor, Honored Doctor of Ukraine;

Dmytro LAVRENKO - director of the KP "Poltava Regional Center for Emergency Medical Aid and Disaster Medicine" of the Poltava Regional Council, candidate of medical sciences, associate professor;

Arsen GUDYMA - Head of the Department of Disaster Medicine and Military Medicine of the Ternopil National Medical University named after AND I. Gorbachevskiy, Ministry of Health of Ukraine;

Serhiy KOTOV - Head of the Poltava City Department for Public Health Protection;

Viktor LYSAK - director of the Department of Health Protection of the Poltava Regional State Administration

Serhii SVYRYDA - Director of Medion Medical Treatment and Diagnostic Center LLC;

Oksana KOVALYOVA - the director of the CNP "City Clinical Hospital of Urgent and Emergency Care named after Prof. O.I. Meshchaninov" of the Kharkiv City Council;

Vitaly KRYLIUK - Doctor of Medical Sciences, leading researcher of the Department of Training Instructors for Providing Medical Aid in Extreme Situations of the "Ukrainian Scientific and Practical Center of Emergency Medical Aid and Disaster Medicine of the Ministry of Health of Ukraine"

Lyubomyr TKACH - doctor of the highest category, head of the consultative telemetry department of the emergency medical aid station of the KP "Poltava Regional Center of Emergency Medical Aid and Disaster Medicine" of the Poltava Regional Council

The period of reviewing the education and professional programme is once a year.

Updating, reviewing, amendments and addendum of the educational and professional program Paramedic of the first (Bachelor's) level of higher education in the speciality 223 Nursing of the field of study 22 Health:

Academic year	The decision of the Academic Council (date, Minutes No.)
2019-2020	13 May 2020, №9
2020-2021	23 June 2021, №2
2021-2022	15 June 2022, №10
2022-2023	21 June 2023, №9
2023-2024	17 April 2024, №7

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## 1. Profile of educational and professional program

Components	Description of the educational and professional program
<b>1.1. General information</b>	
<b>Full name of higher education institution</b>	Poltava State Medical University
<b>Full name of the structural unit</b>	Medical Education and Research Institute International Faculty Department of Accident and Military Medicine
<b>Higher education degree and title of qualification in the original language</b>	Ступінь вищої освіти: бакалавр освітня кваліфікація: бакалавр медсестринства спеціалізація: 223.02. Екстрена медицина професійна кваліфікація: парамедик
<b>Official name of the educational and professional program</b>	Paramedic
<b>Type of diploma and scope of educational and professional program</b>	Bachelor's Diploma, single issue, 180 ECTS credits based on the complete general secondary education, duration of study 2 years and 10 months
<b>Availability of accreditation</b>	Accredited by the National Agency for Higher Education Quality Assurance, Ukraine Certificate No.3103 dated 20.04.2022. Valid until 01.07.2027
<b>Cycle/Level</b>	NQF of Ukraine – Level 6 рівень, FQ-EHEA – the first cycle, EQF-LLL – Level 6
<b>Prerequisites</b>	Evidence of complete general secondary education. Conditions for admission are determined in the “Rules for Admission to Poltava State Medical University”.
<b>Language(s) of teaching</b>	Ukrainian, English
<b>Validity of the educational and professional program</b>	6 years
<b>Internet address of</b>	email: <a href="mailto:mail@PSMU.edu.ua">mail@PSMU.edu.ua</a>



<p><b>permanent placement of the description of the educational and professional program</b></p>	
<p align="center"><b>1.2. The aim of the educational and professional program</b></p>	
<p>To provide high-quality university education, in-depth theoretical and practical training of the students in the Bachelor's of nursing programme, who possess the fundamental knowledge and relevant competencies necessary for the effective provision of emergency medical care to the sick and injured in an emergency situation at the scene, and are able to use knowledge and practical skills, abilities to solve typical tasks of a paramedic; strive for self-development and self-improvement, formation of creative thinking. To develop in the students the ability for effective activity and development of hard skills and soft skills.</p> <p>To train the students of the Bachelor's of nursing programme based on the principles of student-centered learning, academic integrity, and academic freedom.</p> <p>The aim of the educational and professional program correlates with the mission, development strategy and concept of educational activity of the university.</p>	
<p align="center"><b>1.3. The description of the educational and professional program</b></p>	
<p><b>Subject area (field of study, speciality, programme subject area)</b></p>	<p>Field of study: 22 Health  Speciality: 223 Медсестринство  Program subject area: 223.02. Emergency Medicine</p> <p>The object of study is organization and management of the work of nursing structural divisions of health care institutions, performance of all types of nursing activities and nursing interventions in accordance with the programme subject area 223.02. "Emergency medicine" of the professional qualification "Paramedic".</p> <p><b>Objectives of the study:</b> training of a nursing specialist to perform all types of activities and interventions provided for by the programme subject area of emergency medicine, professional qualification of a paramedic, competitive on the labor market for specialists for the needs of the emergency medical assistance service, who possess the up-to-date innovative clinical thinking, relevant competencies necessary for effective provision of emergency medical assistance.</p> <p><b>Theoretical content of the subject area:</b> awareness of</p>

	<p>public health issues; diagnosis and treatment of human diseases at the individual, family, and population levels for the professional activities of specialists in 223 Nursing, 223.02. Emergency Medicine, paramedic professional qualification; it is based on the concepts, categories, principles and technologies of providing emergency medical assistance to a person in an emergency situation.</p> <p><b>Methods, techniques and technologies</b> anamnestic, clinical, laboratory, instrumental methods of carrying out the diagnostic process, determining the leading symptoms and syndromes, determining the nursing diagnosis; technologies of diagnosis, treatment and prevention, management and organization of work in the field of health care.</p> <p><b>Tools and equipment:</b> armamentarium for medical manipulations; the most wide-spread advanced diagnostic, therapeutic and other equipment, objects and devices for carrying out professional activities.</p>
<p><b>Orientation of the educational and professional programme</b></p>	<p>The educational and professional; the programme has both the academic and applied orientation according to the ISCED.</p>
<p><b>The main focus of the educational and professional program</b></p>	<p>Special education in the field of study 22 Health, specialty 223 Nursing, programme subject area 223.02. Emergency medicine. The educational and professional program is aimed at in-depth fundamental theoretical and practical study of undergraduate students seeking the degree of the Bachelor's of Nursing who have knowledge of the theory and practice of emergency medical care and are able to use knowledge and practical skills, abilities to solve typical tasks of a paramedic.</p> <p>Key words: paramedic, emergency medicine, nursing, emergency conditions.</p>
<p><b>Features of the programme</b></p>	<p>The EPP Paramedic is aimed at providing training of a specialist of a new generation, able to work in the conditions of reforming the health care system, a multifunctional, rapidly changing environment and be able to solve complex specific tasks and practical problems. A feature of this program is a comprehensive approach that combines the use of the advanced international and national experience and the practical orientation of training. The EPP is focused on obtaining thorough theoretical knowledge of fundamental medical sciences, which is provided by the university departments with modern innovative equipment and learning technologies.</p>

	<p>The main emphasis of the EPP is on the formation of high-quality practical skills and abilities in the field of emergency medical care. The simulation center of the university functions for the implementation of the academic staff and clinical practice of the students at the Simulation Center at PSMU, CE "Poltava Regional Center for Emergency Medical Aid and Disaster Medicine of the Poltava Regional Council" and LLC "Medion Medical Treatment and Diagnostic Center". The program is formed as an optimal combination of university education and professional requirements.</p> <p>The uniqueness of the EP also lies in high-quality personnel: the theoretical component of the disciplines is mainly taught by the Doctors of Sciences, Professors, and the practical component is taught by emergency medical care specialists.</p> <p>The EP provides an opportunity to obtain the education that is based on active learning technologies, a combination of opportunities for the development of professional and social skills, and is sufficient for the effective performance of tasks of an innovative nature in the field of emergency medicine.</p>
<b>1.4. Suitability of graduates for employment and further study</b>	
<b>Suitability for employment</b>	<p>The graduate is able to work in health care institutions as part of the field team of emergency medical aid and disaster medicine centers, in emergency departments and to hold the position of a paramedic (code KP 3221 of the National Classifier of Ukraine DK 003:2010 "Profession Classifier", approved by the order of Derzhspozhivstandard as of 28.07.2010 No. 327 with changes approved by the Order of the Ministry of Economy and Development as of 10/26/2017 No. 1542, which is effective from 11/01/2017) in accordance with the qualification characteristics set forth in Clause 51 of the "SPECIALISTS" section of the Handbook of Qualification Characteristics of Employees' Professions</p>
<b>Further study</b>	<p>Continuation of studies at the second (Master's) level of higher education, acquisition of additional qualifications in the system of postgraduate education and adult education.</p>
<b>1.5. Teaching and assessment</b>	
<b>Teaching and learning</b>	<p>The learning is based on the principles of student-centeredness, academic freedom, individual and personal approach; is implemented through communicative,</p>

	integrated approaches to learning, self-learning; research-based learning, enhanced professional orientation; forms of educational activities are lectures, practical classes, seminars, independent educational and research work, application of distance learning technologies, trainings, master classes, case studies, team work and project activities, etc.
<b>Assessment</b>	<p>Formative assessment (written and oral comments, teachers' instructions in the learning process, self-assessment and commented mutual assessment of students).</p> <p>Summative assessment in the form of tests, final module tests, exams; ongoing assessment during the study of educational components (testing; presentations; analysis of texts or data; essays, etc.).</p> <p>Current control, semester control, assessment of work performance in the implementation of emergency scenarios using standardized patients, mannequins, dummies, clinical and pre-diploma practice.</p> <p>Educational achievements of students are assessed according to the 200-point ECTS scale (A, B, C, D, E, FX) and a 4-point national scale ("excellent", "good", "satisfactory", "unsatisfactory"), for pass/fail tests - on a verbal scale ("pass", "fail").</p>
<b>1.6. Programme competencies</b>	
<b>Integral competence</b>	<p>Здатність розв'язувати складні задачі і проблеми у The ability to solve complex tasks and problems in the field of emergency medical care at the pre-hospital and early hospital stages or during the training process, which involves the application of certain theories and methods of relevant science, conducting research and/or innovation and is characterized by the complexity and uncertainty of conditions and requirements.</p>
<b>General competences (GC)</b>	<p>GC 01. The ability to realize one's rights and responsibilities as a member of society, to be aware of the values of a civil (free democratic) society and the need for its sustainable development, the rule of law, the rights and freedoms of a person and a citizen in Ukraine.</p> <p>GC 02. The ability to preserve and multiply moral, cultural, scientific values and achievements of society based on an understanding of the laws of development of the subject area, its place in the general system of knowledge about nature and society and in the development of society, technology and techniques.</p>

	<p>GC 03. Ability to think abstractly and generate ideas.</p> <p>GC 04. Ability to apply knowledge in practical situations.</p> <p>GC 05. Knowledge and understanding of the subject area and understanding of professional activity.</p> <p>GC 06. Ability to communicate in the national language both orally and in writing.</p> <p>GC 07. Ability to communicate in a second (foreign) language.</p> <p>GC 08. Be responsible and persevere with tasks and responsibilities.</p> <p>GC 09. Ability to make a rational decision.</p> <p>GC 10. Ability to work in a team and take personal responsibility.</p> <p>GC 11. The ability to constructively interact with other people, regardless of their origin and cultural characteristics, and respect for diversity.</p> <p>GC 12. Ability to study and self-study.</p> <p>GC 13. Ability to be critical and self-critical.</p> <p>GC 14. Ability to act on the basis of ethical judgments.</p> <p>GC 15. Ability to find, process and analyze information from various sources, use information and communication technologies.</p>
<p><b>Special (professional, subject) competencies</b></p>	<p>SC 1. Ability to apply professional and legal standards in everyday professional practice.</p> <p>SC 2. The ability to recognize and interpret signs of health and its changes, illness or disability (assessment/diagnosis), limitations of the possibility of full-fledged life activities, and to determine the problems of patients with various diseases and conditions.</p> <p>SC 3. Application of professional skills (abilities), medical approaches, interventions and actions to provide the patient/client with dignified treatment, privacy/intimacy/, confidentiality, protection of his/her rights, physical, psychological and spiritual needs on the basis of transcultural nursing, tolerant and non-judgmental behavior.</p> <p>SC 4. Ability to perform hardware tests and emergency procedures, effectively apply a set of professional skills (abilities), medical techniques, interventions and actions in assessing the functional state of patients/victims, preparing them for diagnostic studies and taking biological material for laboratory and other studies.</p> <p>SC 5. Preservation of the specialist's own health when providing care, performing manipulations and procedures, when moving and transporting the patient/victim.</p>

SC 6. The ability to assess the scene for threats to one's own life and the lives of other people, to identify factors affecting the condition and health of patients and to ensure one's own safety.

SC 7. Ability to maintain integrity of scene, physical evidence and interact with other emergency services.

SC 8. Ability to examine the sick and injured for emergency conditions.

SC 9. Ability to conduct medical triage, make decisions about the amount of care and hospitalization.

SC 10. The ability to provide emergency medical care for injuries or diseases of the respiratory, cardiovascular, endocrine, immune, nervous, digestive and genitourinary systems, for mental disorders, for damage to the musculoskeletal system, for external factors, and for childbirth.

SC 11. The ability to know how to determine the group of medical drugs, features of their pharmacokinetics and pharmacodynamics.

SC 12. Ability to calculate the dose of drugs administered to the patient.

SC 13. Ability to perform medical procedures and manipulations: inhalations, injections; provide intraosseous and peripheral intravenous interventions.

SC 14. Ability to identify and provide assistance with adverse drug reactions.

SC 15. The ability to carry out urinary catheterization, gastric probes, ensure patency of the upper respiratory tract, perform decompression puncture of the pleural cavity, install naso- and oropharyngeal airways, supralaryngeal airways, perform tracheal intubation and surgical restoration of airway patency.

SC 16. Ability to stop hemorrhages with direct pressure, tamponade, and mechanical means to stop hemorrhage.

SC 17. Ability to stabilize the spine, stabilize and immobilize the musculoskeletal system, and apply bandages in case of injuries.

SC 18. Ability to perform cardiopulmonary resuscitation, including using a defibrillator and breathing apparatus.

SC 19. Ability to record and interpret electrocardiogram resulting data.

SC 20. Ability to report to the emergency department information about the process of providing medical care to the patient at the scene and during transport to the department, if necessary, assist the personnel of the

	<p>emergency medical department.</p> <p>SC 21. The ability to adhere to the principles of medical deontology, to ensure the preservation of medical secrecy and to constantly improve one's professional level.</p> <p>SC 22. Ability to drive a specialized medical emergency medical vehicle.</p>
<p><b>1.7. The normative content of the training of higher education applicants, formulated in terms of learning outcomes (programmatic learning outcomes)</b></p>	
<p>PLO 1. To know and understand the role and responsibilities of paramedics in the emergency medical care system; basics of legislation in the health care system.</p> <p>PLO 2. To know and understand the anatomy, physiology and other basic medical sciences that underlie the professional activities of paramedics, at the level necessary to achieve other results of the educational program.</p> <p>PLO 3. To assess the safety of the scene, demonstrate the safety of staff and patients, the use of personal protective equipment.</p> <p>PLO 4. To know and understand the appropriate use of a set of skills (abilities), medical means, interventions and actions to ensure patient / client dignity, privacy / intimacy, confidentiality, protection of his/her rights, physical, psychological and spiritual needs based on transcultural approach, tolerant and irrational behavior.</p> <p>PLO 5. To know and understand the principles of infectious safety, health care, manipulation and procedures when moving and transporting the victim / patient.</p> <p>PLO 6. To conduct an initial examination of patients of different ages, to evaluate the degree of identified disorders, to determine the need for emergency rescue measures. To conduct a subjective and objective examination of various organs and systems of the patient / victim and evaluate the data obtained</p> <p>PLO 7. To carry out diagnostics according to the programme subject area of emergency medicine, identify and assess the problems of the patient / victim and provide emergency medical care for injuries or diseases of the respiratory, cardiovascular, endocrine, immune, nervous, digestive and genitourinary systems, mental disorders, musculoskeletal disorders of the musculoskeletal system, under the influence of external factors and in labor.</p> <p>PLO 8. To perform medical manipulations appropriately in order to take measures to stabilize the functional state of the body.</p> <p>PLO 9. To demonstrate effective airway patency in patients of all ages using instrumental techniques, including intubation with oxygenation, manual and mechanical ventilation, and surgical airway patency.</p> <p>PLO 10. To demonstrate the ability to use appropriate communication skills and behavior with the patient, his/her family, colleagues and medical staff.</p> <p>PLO 11. To communicate in academic and professional language, including oral and written communication in Ukrainian and English.</p>	

PLO 12. To use critical thinking skills to organize and deliver EMC in mass cases, in peacetime and wartime emergencies, including those involving the release of highly toxic substances, hazardous materials, and infectious diseases.

PLO 13. To know the group affiliation of approved drugs, features of their pharmacokinetics and pharmacodynamics, methods of administration, dosage, indications, contraindications, interaction, side effects, overdose and methods of their elimination, including narcotic drugs. Be able to use pharmacological agents (according to list 3) and with absolute accuracy to demonstrate methods of drug administration: intramuscularly, subcutaneously, intradermally, intravenously (peripheral and central veins), intraosseously.

PLO 14. To be able to prepare the patient, collect and refer biological material for laboratory and instrumental study.

PLO 15. To describe the early signs of the threat of sudden cardiac arrest (SCA), indicate appropriate steps for the treatment of SCA and demonstrate cardiopulmonary resuscitation (in a phantom) in adults according to up-to-date international standards. Identify critical heart rhythm disorders (static images and dynamic rhythms on the monitor) and indicate the algorithm of further treatment. Provide emergency medical care based on an emergency diagnosis.

PLO 16. Ability to accurate performance of interdependent professional functions.

PLO 17. To preserve and enhance the moral, cultural, scientific values and achievements of society based on an understanding of the laws of society.

PLO 18. Ability to self-study and professional development.

PLO 19. To detect SCA in children, indicate appropriate steps for its treatment and demonstrate cardiopulmonary resuscitation (on a phantom) in accordance with the up-to-date international standards.

PLO 20. Appropriate medical records should be kept accurately.

PLO 21. Ability to apply in practice the principles of ethics and deontology, to understand the social and legal consequences of professional activity.

### **1.8. Educational environment and resources**

<b>Teaching staff</b>	<p>The implementation of the educational and professional program is ensured by the academic staff whose level of scientific and professional activity is evidenced by the fulfillment of at least four types and results from those listed in paragraph 38 of the Licensing conditions, approved by Resolution of the Cabinet of Ministers of Ukraine No. 1187 "On the approval of the Licensing conditions for the conduct of educational activities" as of 30 December 2015 with changes approved by the resolution of the Cabinet of Ministers of Ukraine as of May 10, 2018. No. 347, as of March 24, 2021. No. 365.</p> <p>The basic departments providing the educational process are the Department of Accident and Military</p>
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	<p>Medicine, the Department of Anesthesiology and Intensive Care. Academic staff of the Department of Experimental and Clinical Pharmacology with Clinical Immunology, Allergology; the Department of Psychiatry, Narcology and Medical Psychology; the Department of Surgery No. 3; the Department of Pathological Anatomy with Autopsy Course; the Department of Foreign Languages with Latin and Medical Terminology, etc. are involved in the teaching of individual educational components.</p> <p>During the organization of the educational process, practicing professionals are involved.</p>
<p><b>Material and technical support</b></p>	<p>The material and technical base of the Poltava State Medical University allows to implement the educational process at a modern level in accordance with the requirements of the education standard for the training of specialists in the specialty 223 Nursing OPP Paramedic specialization 223.02 Emergency medicine professional qualification paramedic.</p> <p>The area of the educational premises complies with the Licensing Terms. The educational process is implemented in classrooms (all equipped with multimedia projectors), classrooms and laboratories, training rooms, and computer rooms. The practical skills of the applicants are practiced in the Simulation Center of the PSMU and KP "Poltava Regional Center for Emergency Medical Aid and Disaster Medicine" of the Poltava Regional Council.</p> <p>In order to organize the access of applicants to the Internet, a wireless connection covering the areas of all educational buildings of the university, dormitories, library and reading rooms has been organized. In addition, the material base of organizations and enterprises, which are the bases of clinical departments of the university, is used for the training of applicants.</p> <p>Pursuant to the resolution of the Cabinet of Ministers of Ukraine dated December 30, 2015. No. 1187 (with amendments and additions introduced by resolutions of the Cabinet of Ministers of Ukraine dated May 10, 2018 No. 347, dated March 24, 2021 No. 365), the design, construction and reconstruction of buildings, structures and premises of the university are carried out taking into account the needs of persons with special educational needs .</p>
<p><b>Information, educational and</b></p>	<p>The official website of the University contains information about: EPP Paramedic, academic plan for students on EPP, educational environment, educational</p>

<p><b>methodological support</b></p>	<p>activities, structural units providing support for EPP, schedules of the educational process, class schedules, final control forms, admission rules, etc.</p> <p>The library of PSMU is an information center that has the latest reference and monographic publications on public health and related sciences, educational literature, legislative and regulatory documents, abstracts of the theses and dissertations, collections of scientific works, periodicals, etc.</p> <p>The library has created all the conditions for high-quality information and reference and bibliographic services for visitors, library processes are partially automated, its own bibliographic resources have been formed, and access to global open access scientific and metric platforms has been ensured. Own information resources have been created and are constantly updated, the institutional repository "eaPSMU" electronic archive - the repository of PSMU is functioning.</p> <p>The library has created all the conditions for high-quality information and reference and bibliographic services for visitors, library processes are partially automated, its own bibliographic resources have been formed, and access to global open access scientific and metric platforms has been ensured. Own information resources have been created and are constantly updated, the institutional repository "eaPSMU" electronic archive - the repository of PSMU is functioning. The library is a member of the Corporation for the creation of an electronic catalog of medical libraries of Ukraine. Test access to international information platforms Web of Science, EBSCO Publishing, digital library of peer-reviewed journals JSTOR (Journal STORage, USA) was organized.</p>
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### 1.9. Academic mobility

<p><b>National Credit Mobility</b></p>	<p>It is carried out on the basis of the Law of Ukraine “On Higher Education”</p>
<p><b>International Credit Mobility</b></p>	<p>It is carried out on the basis of the Law of Ukraine “On Higher Education”</p>
<p><b>Training of foreign higher education students</b></p>	<p>Admission/enrollment of foreign citizens and stateless persons is carried out in accordance with the "Rules of admission to the Poltava State Medical University" based on the results of the entrance exams and taking into account the success of their previous level of education. Education of foreign higher education seekers and stateless</p>

	persons is conducted in accordance with the "Regulations on the Organization of the Educational Process at the Poltava State Medical University".
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## List of components of the educational and professional program and its logical sequence

### 2.1. List of components of the educational and professional program

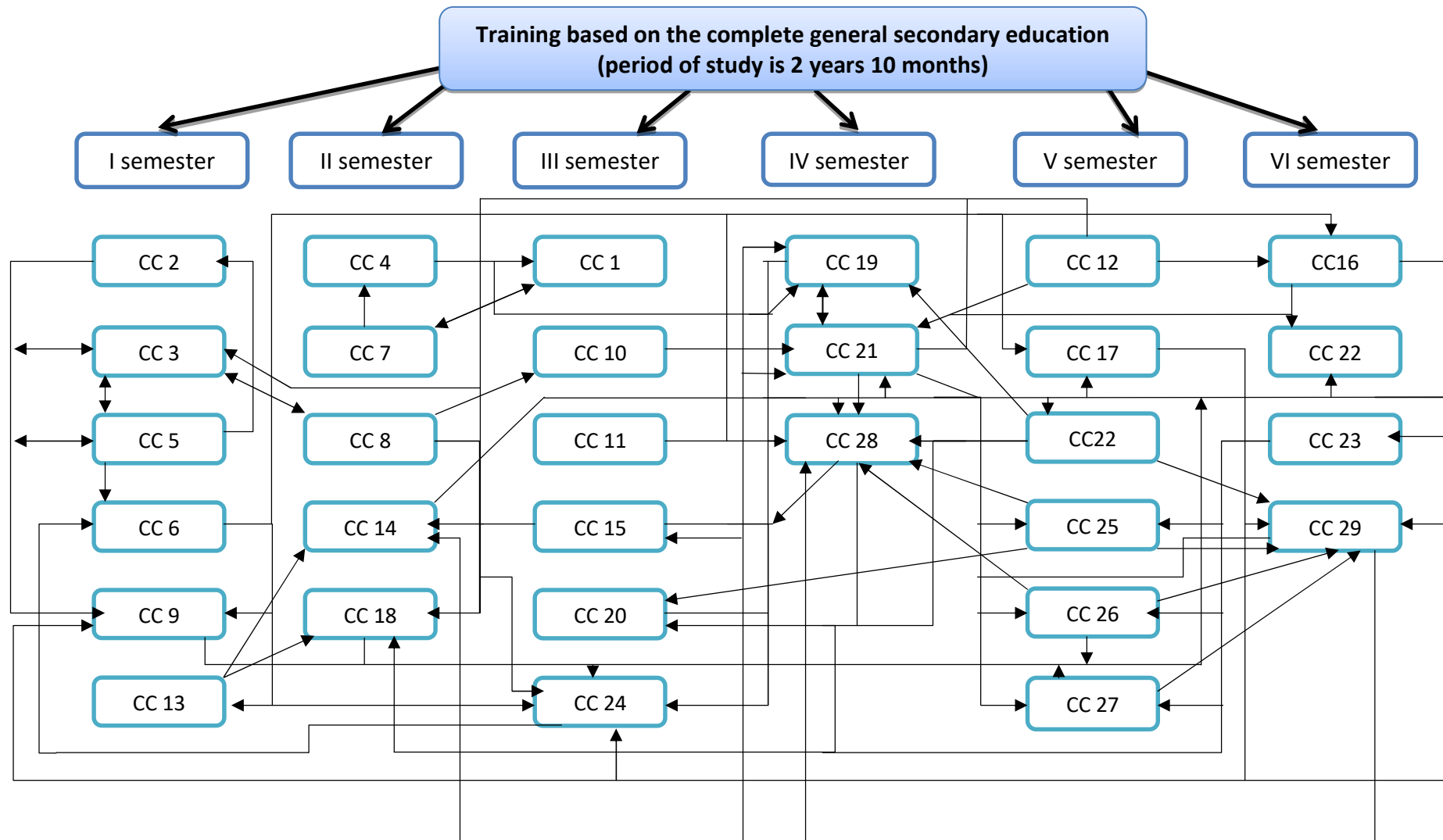
Code	Components of the educational program (disciplines,	Code	Components of the educational program (disciplines,
<b>Compulsory components of the EPP</b>			
<b>I. The cycle of general training</b>			
CC 1.	Integrated course. Philosophy, medical ethics and deontology	4	FMC
CC 2.	English language (for professional purposes)	5	FMC
CC 3.	Basics of the Latin language with medical terminology	4	FMC
CC 4.	Fundamentals of medical law of Ukraine	3	FMC
CC 5.	Ukrainian language (for professional purposes)	3	FMC
CC 6.	Basics of general psychology and psychology of crisis situations	4	FMC
CC 7.	History of Ukraine	3	FMC
CC 8.	Human anatomy and physiology	9	FMC
<b>Total of the cycle</b>		<b>35</b>	
<b>II. The cycle of professional training</b>			
<b>Cycle of professional training in specialty 223 Nursing</b>			
CC 9.	Digital technologies in healthcare. Cyber security and cyber hygiene	5	FMC
CC 10.	Basics of pathology	6	FMC
CC 11.	Basics of epidemiology	3	FMC
<b>Cycle of professional training in specialty 223.02. Emergency Medicine</b>			
CC 12.	Emergency tactical medical assistance	4	FMC
CC 13.	Basics of practical activity of a paramedic (Introduction to specialty)	3	FMC
CC 14.	First aid	3	FMC
CC 15.	Basics of pharmacology and features of drug use in emergency conditions	5	FMC

CC16.	Medicine of emergency situations and emergency medical aid for mass injuries	4	FMC
CC 17.	Organization and EC of emergency medical care	3	FMC
CC 18.	Medical manipulation technique	3	FMC
CC 19.	Advanced resuscitation and intensive care measures	9	Exam
CC 20.	Examination and determination of the patient's condition	3	FMC
CC 21.	Emergency assistance in case of emergencies	5	Exam
CC 22.	Emergency care for injuries	10	Exam
CC 23.	Emergency assistance to special categories people	3	FMC
CC 24.	Emergency psychiatric care	3	FMC
CC 25.	Acute neurological diseases	4	FMC
CC 26.	Emergency obstetric and gynecological care	3	FMC
CC 27.	Emergency conditions in pediatrics	4	FMC
CC 28.	Practical training	7	FMC
CC 29.	Pre-diploma practice	8	FMC
<b>Total of the cycle</b>		<b>98</b>	
<b>Elective components of the EPP</b> (the student chooses a total of 15 ECTS credits annually from the proposed list or Catalog of selective disciplines of the PSMU)			
EC	Elective courses	45	
EC 1.	Foreign language (English)	3	pass/fail test
EC 2.	Preventive medicine	3	pass/fail test
EC 3	Occupational safety	3	pass/fail test
EC 4	Information technologies in medicine	3	pass/fail test
EC 5	Basics of biological physics and medical equipment	3	pass/fail test
EC 6.	Management in the emergency medical care	3	pass/fail test
EC 7.	Public security and health safety	3	pass/fail test
EC 8.	Management and organization of medical provision of the population and troops	3	pass/fail test
EC 9.	Post-traumatic stress disorders	3	pass/fail test
EC 10.	Interpersonal communication and team interopeability	3	pass/fail test
EC 11.	Critical toxicological care	3	pass/fail test
EC 12.	Scin and veneral diseases	3	pass/fail test
EC 13.	Acute diseases of the eye and ENT-organs	3	pass/fail test
EC 14.	Acute surgical pathology	3	pass/fail test

EC 15.	Professional communication. Key competences.	3	pass/fail test
EC 16.	Biorthicsa and biosafety	3	pass/fail test
EC 17.	Methodology of the research work	3	pass/fail test
EC 18.	Psychology of communication	3	pass/fail test
EC 19.	Basics of leadership	3	pass/fail test
EC 20.	Adverse drug effect	3	pass/fail test
EC 21.	Clinical topographical and age-related human anatomy with operative surgery	3	pass/fail test
EC 22.	Emergency situations and professional activity of a paramedic	3	pass/fail test
EC 23.	History of medicine	3	pass/fail test
EC 24.	Sign language	3	pass/fail test
EC 25.	Human growth and development	3	pass/fail test
EC 26.	Essentials of academic writing and ethics	3	pass/fail test
EC 27.	ECG: normal paramaters and signs of pathology	3	pass/fail test
EC 28.	Resuccucation and intensive care of newborns	3	pass/fail test
EC 29.	Physical recreation	3	pass/fail test
EC 30	rimary surgical technique in extreme situations and modern technologies in operative surgery	3	pass/fail test
EC 31	Imageology	3	pass/fail test
EC 32	Media education and media literacy	3	pass/fail test
EC 33	Health resources	3	pass/fail test
EC 34	Step to «Krok»	6	pass/fail test
EC 35	Human anatomy in simulation technologies	3	pass/fail test
<b>Total of the cycle</b>		<b>45</b>	
<b>Attestation</b>			
Unified State Qualification Exam		2	
<b>Total scope of the educational program</b> including compulsory components (75%) elective components (25%)		180 credits	
<b>Extra-credit discielines</b>			
Physical training			

\***CC 5** Ukrainian language (for professional purposes) students-foreign citizens and stateless persons are taught as CC 5 Ukrainian language as a foreign language in the amount of 3 ECTS credits with final modular control

## 2.2. Structural and logical scheme of the EPP Paramedic



### **3. The form of attestation of higher education students**

The attestation of higher education students of the EPP Paramedic of the first (bachelor's) level of higher education, specialty 223 Nursing is conducted in the form of a unified state qualification exam, which consists of two stages:

1. Stage 1 – test license integrated exam "Krok" (subject to the adoption of relevant regulatory documents of the Ministry of Health of Ukraine);

2. Stage II – practice-oriented exam.

Successful completion of the educational and professional program involves awarding the Bachelor's degree and educational qualification of Bachelor of Nursing, professional qualification - Paramedic.

Attestation is carried out transparently and publicly.









PLO 18	*	*	*	*	*	*	*	*	*	*			*		*						*	*	*				*	*
PLO 19																		*										
PLO 20											*	*	*			*	*										*	*
PLO 21	*			*		*							*		*		*				*	*	*	*	*	*	*	*

Guarantor of the educational program  
 PhD, Associate Prof., Head of the Department of  
 Accident and Military Medicine at PSMU

Liudmyla HORDIENKO

### **List 1 (nursing subjective and objective examination)**

In health care facilities and at home by communicating with patients of different age groups or their relatives, a sick child and his/her parents, and conducting an objective examination, be able to

1. Assess the general condition of patients of different age groups.
2. Conduct a general behavioral assessment.
3. Assess body position (active, passive, forced), facial expression.
4. Assess the state of consciousness.
5. Conduct an examination:
  - skin, subcutaneous base, assess rash;
  - peripheral lymph nodes;  
head and face
  - pharynx and tonsils
  - nose
  - ears
  - hair (including pediculosis);  
lips, oral cavity, tongue;  
teeth (milk and permanent), determine compliance with the teething pattern;
  - neck, thyroid gland;  
nails.

6. To conduct palpation:

- skin, subcutaneous base;  
peripheral lymph nodes;  
neck, thyroid gland;
- affected area - limbs, abdomen.

Take anthropometric measurements using medical equipment.

Assess physical development of children using standard tables, graphs of physical development, body mass index (BMI).

Determine the state of nutrition.

Measure body temperature and record it in the temperature sheet.

Using the scheme and method of examination of the patient, with the help of medical equipment, based on knowledge of the anatomical and physiological features of the respiratory system in patients of different age groups, be able to conduct

- - assessment of the nature of cough;
- - assessment of sputum;
- - examination of the chest;
- - counting the respiratory rate;
- - palpation of the chest;
- - spirometry (determination of FVC);
- - percussion, auscultation of the chest;
- - determination of the chest circumference during inhalation and exhalation.

Using the scheme and methods of examination of the patient, based on knowledge of the anatomical and physiological features of the circulatory system in patients of different age groups, be able to:

- - determine the heartbeat;
  - perform percussion and auscultation of the heart;
  - determine the heart rate;
  - determine the properties of the pulse;
  - measure blood pressure in the arms and legs and evaluate its results.

Using the scheme and methods of examination of the patient with the help of

medical equipment, based on knowledge of the anatomical and physiological features of the musculoskeletal system, in patients of different age groups, be able to conduct

- examination and palpation of muscles, spine, limbs and joints;
- measure the volume of movements in the joints.

Using the scheme and methods of examination of the patient, with the help of medical equipment, based on knowledge of the anatomical and physiological characteristics of the digestive system, be able to conduct and evaluate in patients of different age groups

- assessment of vomit;
- assessment of stool;
- abdominal examination;
- superficial palpation of the abdomen;
- abdominal percussion (determination of flatulence and ascites)
- abdominal auscultation;
- checking the Schotkin-Blumberg symptom.

Using the scheme and methods of examination of the patient, based on knowledge of the anatomical and physiological features of the urinary system in patients of different age groups, be able to conduct

- examination of the external urinary and genital organs;
- checking the Pasternacki symptom;
- assessment of urine and urination;
- determination of daily diuresis;
- determine water balance.

Using the scheme and methods of examination of the patient, with the help of medical instruments, based on knowledge of the anatomical and physiological features of the nervous system in patients of different age groups, be able to:

Assess neuropsychological development;

- check the acquired skills and abilities;
- evaluate motor skills;
- assess sensory reactions;
- assess statics;
- assess speech;
- assess emotions and social behavior.
- 7. Using the scheme and methods of examination of the patient, based on knowledge of the anatomical and physiological characteristics of the organ of vision in patients of different age groups, be able to
  - turn the eyelid;
  - determine visual acuity;
  - correct refractive errors;
  - determine the field of vision;
  - determine color perception;
  - examine binocular vision;
  - perform palpation of the eye;

8. Using the scheme and methods of examination of the patient, with the help of medical instruments, based on knowledge of the anatomical and physiological features of the ear, throat, nose in patients of different age groups, be able to conduct:

- Examination and palpation of the outer ear and goatee;
- otoscopy;
- examination of hearing in whispered and spoken languages.

- 9. Using the scheme and methods of examination of a pregnant woman with the help of medical equipment, be able to:
  - measure abdominal circumference;
  - measure the height of the bottom of the uterus;
  - listen to the fetal heartbeat;
  - perform the McClure-Aldrich test;
  - determine the duration of pregnancy and childbirth;
  - determine the external dimensions of the pelvis;
  - measure the Solovyov index;
  - determine the duration of contractions and pauses between them;
  - inspect the litter for integrity;
  - Determine the signs of afterbirth separation;
  - to conduct a toilet for women in labor;
  - determine the amount of allowable and actual blood loss;
- 10. In neonatology to be able to:
  - assess the condition of the newborn by indicators of adaptation;
  - determine the signs of fetal maturity;
  - determine the signs of overmature fetus

**List 2 (measures to stabilize the functional state of the body)**

In health care facilities and at home, using the standards of professional activity, be able to

- care for the patient in different periods of fever;
- perform peripheral vein catheterization and catheter care;
- care for patients of different age groups in case of pain syndrome;
- care for patients with cough;
- care for patients with shortness of breath;
- care for patients with hemoptysis and pulmonary bleeding;
- care for the patient after surgery;
- perform tracheal sanitation through a tracheostomy cannula;
- toileting and dressing of the tracheostomy;
- supply oxygen from an oxygen pillow;
- supply oxygen through nasal catheters, intubation tube, mask;
- perform eye wash;
- treat the cartilaginous edge of the eyelids;
- care for the patient during vomiting;
- use a gas tube;
- wash the stomach;
- perform a cleansing enema;
- perform bladder catheterization with a soft catheter;
- to rinse the bladder.
- install and replace a transurethral Foley catheter;
- replace a Foley catheter inserted through a cystostomy;
- to ensure airway patency by all methods (spinal extension in the cervical spine, airway, laryngeal mask, combi tube, tracheal intubation, conicopuncture).

### **List 3 (prescription, storage and use of pharmaceuticals)**

In health care facilities, using the current regulatory documents of the Ministry of Health of Ukraine and medical records, be able to

- make a sample of doctor's prescriptions from the prescription sheet;
- arrange pharmaceuticals in a medical cabinet;
- apply ointments;
- apply antiseptic agents;
- apply external hemostatic agents;
- apply shaking mixtures, pastes, oils;
- apply plasters;
- apply powders;
- instill drops in the nose, ears, eyes;
- dilute and instill leukocyte interferon and laferon into the nose;
- inject medicines under the conjunctiva;
- inject medicines into the larynx;
- inject medicines into the external auditory canal;
- assemble a sterile syringe from a sterilizer and a kraft bag;
- assemble a disposable syringe;
- collect sterile instruments from a sterile table;
- collect pharmaceuticals from ampoules and vials;
- perform intradermal injections;
- perform drug sensitivity tests;
- perform subcutaneous injections;
- draw insulin, heparin into different types of syringes;
- inject oil solutions;
- administer intramuscular injections;
- dilute antibiotics and calculate their doses;
- perform venipuncture, intravenous jet injection of pharmaceuticals;
- administer therapeutic serums, immunoglobulins, anatoxins;
- assemble and fill disposable systems for intravenous infusions;
- perform intravenous drip administration of pharmaceuticals;
- prevent complications after the performed manipulations;
- to carry out local and general irradiation with ultraviolet rays;
  
- to carry out irradiation with infrared rays;
  
- have intraosseous access.

#### **List 4 (preparation of the patient for instrumental examinations, collection and sending of biological material for laboratory tests)**

In health care facilities and at home to conduct laboratory tests using laboratory equipment to be able to

- prepare the patient for various types of laboratory tests
- to determine blood groups and Rh blood type
- conduct a blood group compatibility test
- to conduct a test for biological compatibility of blood
- take blood for biochemical and serological tests
- determine the level of glucose in the blood using test strips, glucometer
- perform intradermal allergy test and record its results
- take biological material from patients with suspected particularly dangerous infections
- to conduct spirometry and bioimpedancemetry
- evaluate the results of basic blood, urine, sputum, feces, etc.

In health care facilities and at home, be able to prepare a patient for instrumental examinations:

- ultrasound examination of abdominal and pelvic organs
- perform electrocardiography;
- deliver biological material to the laboratory;
- take samples of food for laboratory testing (in case of investigation of food poisoning and other emergencies).

#### **List 5 (emergency conditions)**

In health care facilities, at home, in case of unforeseen circumstances, with the help of care items, medical equipment, pharmacological and improvised means, be able to provide emergency pre-hospital care to patients of different age groups in case of

- bronchial asthma attack and asthmatic status;
- stenosing laryngotracheitis;
- pulmonary hemorrhage;
- asphyxia of various etiologies;
- pulmonary edema;
- acute heart rhythm disturbance;
- stroke;
- infectious toxic shock;
- intestinal perforation;
- dehydration;
- hepatic encephalopathy;
- malaria attack;
- fainting;
- collapse;
- hyperthermic syndrome;
- hyperglycemic coma;
- hypoglycemic coma;
- acute urinary retention;
- acute poisoning;
- electric shock;
- acute occupational poisoning;
- heart rhythm disturbances;
- orthostatic hypotension;
- aortic dissection (aneurysm);
  - thromboembolism of the pulmonary artery;



- eclampsia
- anaphylactic shock;
- shocks of other etiologies;
- thyrotoxic crisis
- esophageal bleeding and gastrointestinal bleeding;
- convulsions of various etiologies;
- epileptic seizures;
- food toxicoinfections;
- psychomotor agitation;
- possible complications during and after blood transfusion;
- acute attack of glaucoma;
- injuries of the organ of vision;
- contusion of the organ of vision;
- burns of the organ of vision (thermal, chemical, radiation);
- clinical death.

In health care facilities, at home, in case of unforeseen circumstances, in order to provide emergency first aid in case of bleeding, taking into account the anatomical location of arteries and nerves, using improvised and pharmacological means, medical equipment, based on regulatory documents, be able to

- assess the type of bleeding;
- apply finger pressure to the artery along the length;
- apply a tourniquet;
- apply a tourniquet;
- apply a pressure bandage;
- apply a hemostatic clamp to the vessel;
- perform tight tamponade of the wound;
- apply local cold;
- maximal flexion of the limb;
- maximal extension of the limbs in the joints;
- perform anterior nasal tamponade.

In health care facilities, at home, in case of unforeseen circumstances, in order to prevent wound infection, based on the standards of asepsis and antisepsis, using dressings, be able to apply and remove

- knot sutures;
- Michel staples;
- aseptic wound dressing;
- circular headband;
- reverse headband;
- headband "bonnet"
- a cross-shaped bandage on the back of the head;
- sling-like bandage on the nose;
- a sling-like bandage on the chin;
- "bridle" headband;
- Hippocratic cap bandage;
- circular bandage on the limb;
- spiral bandage on the limb;
- knight's glove dressing;
- reverse bandage on the hand;
- a cross-shaped bandage on the radiocarpal joint;
- a cross-shaped bandage on the ankle joint;
- turtle bandage; spikelet bandage;

- a bandage for the hand; a bandage for the foot;
- large and small earplugs;
- monocular bandage; binocular bandage.

In health care facilities, at home, in case of unforeseen circumstances, in order to provide emergency care in case of closed fractures to prevent the development of traumatic shock, fragmentation and damage to internal organs or tissues, using care items, medical equipment, pharmacological and improvised means, be able to apply

- intramuscular analgesics;
- Kramer splint in case of shoulder fracture;
- Kramer splint in case of forearm fracture;
- Kramer splint in case of fracture of one of the bones of the lower leg;
- Kramer splint in case of fracture of two bones of the lower leg;
- Kramer splint in case of a hip fracture;
- improvised means in case of a spinal fracture;
- aids in case of a pelvic fracture;
- aids for fractured collarbone;
- Dezo bandage; Velpo bandage;
- a cross-shaped bandage on the shoulder joints in case of a clavicle fracture;
- provide emergency care for internal bleeding (in particular, intra-abdominal and hemothorax).

In health care facilities, at home, in unforeseen circumstances, with the help of care items, pharmacological and improvised means, be able to provide emergency first aid in case of

- dislocation of large joints of the limbs;
- dislocation of the lower jaw;
- open mechanical non-penetrating injuries of bones and joints;
- traumatic amputation;
- open penetrating injuries;
- closed mechanical injuries of soft tissues;
- soft tissue injuries;
- thermal injuries (burns and frostbite)
- chemical burns
- electrical injuries;
- acute surgical infection;
- traumatic asphyxiation;
- traumatic brain injuries;
- acute abdomen;
- paraphimosis;
- prolonged compression syndrome;
- growing edema of a limb with a plaster cast;
- foreign body penetration into soft tissues;
- foreign bodies of the conjunctiva or cornea;
- foreign bodies of the nasal cavity, pharynx, larynx, ears, esophagus.

In health care facilities, at home, in case of unforeseen circumstances, using existing standard methods, medical instruments, pharmacological agents, be able to provide emergency care in case of

- severe forms of late gestosis;
- bleeding during pregnancy;
- Bleeding during labor and in the postpartum period;
- threat of uterine rupture;
- ruptures of soft tissues of the birth canal;
- amniotic fluid embolism;

- injuries to the female genital organs.

During combat operations, in order to provide timely first aid and pre-hospital care in accordance with the requirements of regulatory documents on medical support of combat operations of units, be able to

- approach the wounded in various ways;
- pull out the wounded person on their own, on a raincoat, overcoat, using sanitary and special straps;
- carry the wounded in various ways;
- work in respiratory and skin protection equipment (in case of providing assistance in the area contaminated with radioactive and toxic substances).

In case of exposure to penetrating radiation, be able to:

- administer antiemetics;
- perform partial sanitization by mechanical means.

In case of exposure to chemical warfare agents, using personal protective equipment, be able to:

- put on a gas mask on oneself;
- put a gas mask on the affected person;
- select and apply antidote;
- perform mechanical ventilation using DP-10, KI-4 devices;
- use an individual antimicrobial package during partial sanitization.

#### **List 6 (interdependent nursing functions)**

In a health care facility, based on the standards of asepsis and antisepsis, using medical equipment, be able to

- assist during minor gynecological operations;
- assist a surgeon during simple operations.

Delivery of childbirth:

At home and in case of unforeseen circumstances, using existing standard methods, medical instruments, pharmacological and improvised means to be able to

- Deliver a baby. Transportation:

In a health care facility, at home, in case of unforeseen circumstances, with the help of medical equipment and improvised means, be able to

- provide the victim (patient) with the appropriate position;
- transport the victim (patient) in various ways;
- transfer the victim (patient) in various ways;
- transport an amputated body part;
- transport the body of a deceased person;
- use breathing and monitoring equipment in ambulances.
- "First on the scene": to carry out triage in case of mass injuries; to ensure the arrangement and functioning of the triage site.