FEDERAL STATE BUDGETARY EDUCATIONAL INSTITUTION OF HIGHER EDUCATION "AMUR STATE MEDICAL ACADEMY" OF THE MINISTRY OF HEALTHCARE OF THE RUSSIAN FEDERATION

AGREED

Vice-Rector for Academic Affairs

M. V. Loskutova

April 17, 2025

Decision of the CCMC April 17, 2025

Protocol No. 7

APPROVED

by decision of the Academic Council of the FSBEI HE Amur SMA of the Ministry of Health of the Russian Federation April 22, 2025

Protocol No. 15

Acting Rector of the FSBEI HE Amur SMA the Ministry of Health of the Russian

Eederation

I.V. Zhukovets

EDUCATIONAL PROGRAM

industrial practice "Practice In Emergency Medical Manipulations"

Specialty: 31.05.01 General Medicine

Course: 5 Semester: 10

Total hours: 72 hrs.

Total credits: 2 credit units

Form of control: credit (10 semester)

The educational program of the discipline is designed in accordance with the requirements of the Federal State Educational Standard of Higher Education specialist in specialty 31.05.01 General Medicine, approved by the order of the Ministry of Education and Science of Russia dated 08.12.2020 No. 988 (registered with the Ministry of Justice of Russia on 08.26.2020 No. 59493), BPEP HE (2021).

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Reviewers: Professor of the Department of Hospital Surgery with a Course in Pediatric Surgery, Doctor of Medical Sciences, Professor V.V. Yanovoy; Chief freelance specialist of the Ministry of Health of the Amur Region in the field of anesthesiology and resuscitation, head of the center of anesthesiology and resuscitation of the State Autonomous Healthcare Institution of the Amur Region Regional Children's Clinical Hospital R.S. Petrenko.

APPROVED at the meeting of the Department of Anesthesiology, Resuscitation, Intensive Care and Emergency Medical Care, protocol No. 8 dated April 7, 2025.

Head of Department, PhD of Medical Sciences, Docent S.V. Khodus

Conclusion of the Expert Commission on the review of the Educational Programs:

Protocol No. 7 dated April 17, 2025

Expert of the Expert Commission Ph.D. of medical Sciences, Docent

Che S.V. Medvedeva

APPROVED at the meeting of the CMC No. 9: Protocol No. 7 dated April 17, 2025

Chairman of the CMC No. 9, Ph.D. of medical Sciences, Docent Che f S.V. Medvedeva

AGREED:

Dean of the Faculty of Medicine, Ph.D. of Medical Sciences April 17, 2025

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1. EXPLANATORY NOTE

1.1 Characteristics of practice

The industrial practice program "Practice in emergency medical manipulations" (hereinafter referred to as practice) for 5th-year students is implemented at the Department of Anesthesiology, Resuscitation, Intensive Care and Emergency Medical Care.

The practice includes 2 sections:

- 1. General medical manipulation skills (1 credit)
- 2. Emergency medical care in healthcare organizations (1 credit)

The area of professional activity and spheres of professional activity in which graduates who have mastered the specialist program can carry out professional activities: healthcare (in the field of providing primary health care to the population in medical organizations: clinics, outpatient clinics, inpatient and outpatient institutions of the municipal health care system and medical and preventive institutions providing primary health care to the population);

Types of professional activity for which graduates of specialist programs are prepared: medical; scientific research; organizational and managerial.

A graduate who has mastered the specialist program is ready to solve the following professional tasks in accordance with the type(s) of professional activity that the specialist program is focused on:

medical activities: prevention of the occurrence of diseases among the population by carrying out preventive and anti-epidemic measures; participation in the provision of emergency medical care in conditions requiring urgent medical intervention; the formation of motivation in the population, patients and their family members aimed at maintaining and strengthening their health and the health of others; teaching patients basic hygienic measures of a health-improving nature that help prevent the occurrence of diseases and strengthen health;

research activities: analysis of scientific literature and official statistical reviews, participation in statistical analysis and public presentation of the results obtained;

organizational and managerial activities: creation of favorable conditions in medical organizations for the stay of patients and the work of medical personnel; maintenance of medical records in medical organizations; compliance with basic information security requirements;

The objects of professional activity of graduates of the specialist program are:

- individuals (patients) aged 15 to 18 years and over 18 years of age (hereinafter referred to as adolescents and adults);
- population;
- a set of tools and technologies aimed at creating conditions for protecting the health of citizens.

1.2 The purpose and objectives of the practice

The purpose of industrial practice is to teach students practical skills in performing emergency medical procedures.

Objectives of industrial practice:

- o possess practical skills in emergency medical procedures when providing first aid;
- familiarization with the work of intensive care units for patients of various profiles;
- mastering in practice algorithms for emergency care for patients in critical condition.

1.3 The place of practice in the structure of the main professional educational program of higher education

In accordance with the Federal State Educational Standard of Higher Education - specialist in specialty 31.05.01 General Medicine (2020), industrial practice " Practice in emergency medical manipulations " refers to the basic part, Block 2. The total workload is 2 credits (72 hours), held

in the 10th semester in the 5th year. Form of control - credit with an assessment in the 10th semester.

1.4 Forms of practice control

Current monitoring of students' implementation of the internship program is carried out daily by internship supervisors in the form of monitoring the completion of individual internship assignments, keeping internship diaries, and mastering practical skills.

The midterm assessment (test with assessment) consists of a theoretical part - an interview on theoretical questions, testing in the Moodle system and a practical part - checking the acquisition of practical skills and abilities, assessment of reporting forms.

The student's final credit grade is made up of the grade obtained as a result of mastering two modules based on the criteria for assessing learning outcomes: the student must receive positive grades for passing the midterm testing, for work in departments, and for an oral answer during the test.

1.5 Practice Reporting Forms

The forms of reporting on practice are the industrial practice diary and the calendar schedule for completing the practice.

1.6 Requirements for students

Physics, Mathematics, Anatomy, Biochemistry, Pathophysiology, Clinical Pathophysiology, Topographic Anatomy and Operative Surgery, Pharmacology

Knowledge:

- knows the basic laws of physics, physical phenomena and patterns underlying the processes occurring in the human body;
- knows the physical principles of the functioning of medical equipment, the structure and purpose of medical equipment;
- knows the physical and chemical essence of the processes occurring in a living organism at the molecular, cellular, tissue and organ levels;
- knows the electrolyte balance of the human body, colligative properties of solutions (diffusion, osmosis, osmolarity);
- knows the classification and main characteristics of drugs, pharmacodynamics and pharmacokinetics, indications and contraindications for the use of drugs, side effects;
- knows the basic patterns of development and vital activity of the organism based on the structural organization of cells, tissues and organs;
- knows the anatomical, physiological, age-related, gender-related and individual characteristics of the structure and development of a healthy and sick organism;
- knows the concepts of etiology, pathogenesis, morphogenesis, pathomorphosis of disease, nosology, principles of classification of diseases, basic concepts of general nosology;
- knows the functional systems of the human body, their regulation and self-regulation when exposed to the external environment in normal and pathological conditions;
- knows the theoretical foundations of computer science, collection, storage, search, processing, transformation, distribution of information in medical and biological systems, the use of information computer systems in medicine and healthcare.

Skills:

- knows how to use educational, scientific, popular science literature, the Internet professional activity;
- uses physical, chemical and biological equipment;
- uses various dosage forms in the treatment of certain pathological conditions, based on their characteristics, to assess possible manifestations of drug overdose and methods for eliminating them;
- interprets the results of the most common methods of functional diagnostics used to identify pathologies of the blood, heart and blood vessels, lungs, kidneys, liver and other systems;
- determines and evaluates the results of electrocardiography, spirography, thermometry; hematological parameters; distinguishes normal values of metabolite levels (glucose, urea, bilirubin,

uric acid, lactic and pyruvic acids, etc.) from pathologically altered ones in blood serum, reads a proteinogram and explains the reasons for the differences;

- substantiates the principles of pathogenetic therapy of the most common diseases.

Skills:

- has a medical and anatomical conceptual framework; has the skills to use medications in the treatment, rehabilitation and prevention of various diseases and pathological conditions.

Propaedeutics of internal diseases, Hospital therapy, Hospital surgery, pediatric surgery, Clinical pharmacology, Outpatient therapy, Traumatology and orthopedics, Endocrinology, Emergency conditions in therapy, Public health and healthcare, health economics

Knowledge:

- knows the basics of the legislation of the Russian Federation on public health protection, the main regulatory and technical documents;
- knows the modern classification of diseases;
- knows the clinical picture, features of the course and possible complications of the most common diseases that occur in a typical form in different age groups;
- knows the methods of diagnostics, diagnostic capabilities of methods of direct examination of
 patients with therapeutic, surgical and infectious profiles, modern methods of clinical, laboratory,
 instrumental examination of patients (including endoscopic, radiological methods, ultrasound
 diagnostics);
- knows the basics of organizing medical (outpatient and inpatient) care for various population groups;
- knows the diagnostic criteria for various diseases;
- knows the specifics of the organization and scope of work of an outpatient physician, the modern diagnostic capabilities of the outpatient service, methods of conducting emergency measures, indications for planned hospitalization of patients;
- knows the clinical manifestations of the main surgical syndromes;
- knows the specifics of providing first aid and resuscitation to victims of road traffic injuries, drowning, electrical injury, strangulation asphyxia, methods of restoring the patency of the upper respiratory tract, clinical symptoms of injuries to the musculoskeletal system, chest, abdominal cavity, pelvic cavity, head and cranial cavity

Skills:

- determines the patient's status: collect anamnesis, interview the patient and/or his relatives, conduct a physical examination of the patient (inspection, palpation, auscultation, measurement of blood pressure, determination of the properties of the arterial pulse, etc.);
- assesses the patient's condition to decide on the need for medical care, conducts a primary examination of systems and organs: nervous, endocrine, immune, respiratory, cardiovascular, blood and hematopoietic organs, digestive, urinary, reproductive, musculoskeletal and joint, eye, ear, throat, nose:
- sets priorities for solving the patient's health problems: critical (terminal) condition, condition with pain syndrome, condition with chronic disease, condition with infectious disease, disability, geriatric problems, condition of mentally ill patients;
- make a preliminary diagnosis synthesize information about the patient in order to determine the pathology and the causes that cause it:
- knows how to outline the scope of additional research in accordance with the prognosis of the disease,
 to clarify the diagnosis and obtain a reliable result;
- can determine the presence of a fracture or dislocation, free gas in the abdominal cavity, hydropneumothorax from an X-ray;
- knows how to select an individual type of care for treating a patient in accordance with the situation:
 primary care, emergency care, hospitalization;
- is able to formulate indications for the selected method of treatment taking into account etiotropic and pathogenetic agents, justify pharmacotherapy in a specific patient with the main pathological syndromes and emergency conditions, determine the route of administration, regimen and dose of drugs, assess the effectiveness and safety of the treatment;
- uses various methods of administering medications;
- is able to make a preliminary diagnosis and synthesize information about the patient in order to determine the pathology and the causes that cause it;
- knows how to outline the scope of additional research in accordance with the prognosis of the disease,
 to clarify the diagnosis and obtain a reliable result;

- provides first aid in emergency situations, first medical aid to victims in affected areas in emergency situations;
- can examine patients with various traumatic injuries, with purulent-septic conditions, identify life-threatening disorders in bleeding,
- monitors hemodynamic and respiratory parameters;
- carries out resuscitation measures in the event of clinical death;

Skills:

- has mastered the methods of general clinical results of instrumental detailed examination;
- has experience interpreting laboratory diagnostic methods;
- has a command of the clinical diagnosis algorithm;
- has an algorithm for making a preliminary diagnosis with subsequent referral of the patient to the appropriate specialist doctor;
- has mastered the basic medical diagnostic and therapeutic measures to provide first aid in emergency and life-threatening conditions.
- the fundamentals of medical diagnostic and therapeutic measures to provide first aid in emergency and life-threatening conditions.

1.7 Interdisciplinary links with subsequent disciplines/practices

Item No.	Name of subsequent academic disciplines	Section "General Medical Manipulation Skills"	Section "Emergency medical care in healthcare organizations"
1.	Clinical pharmacology	+	+
2.	Phthisiology	+	+
3.	Hospital therapy	+	+
4.	Hospital surgery, pediatric surgery	+	+
5.	Anesthesiology, resuscitation, intensive care	+	+
6.	Traumatology, orthopedics	+	+
7.	Outpatient therapy	+	+
8.	Emergency conditions in the practice of a local therapist	+	+

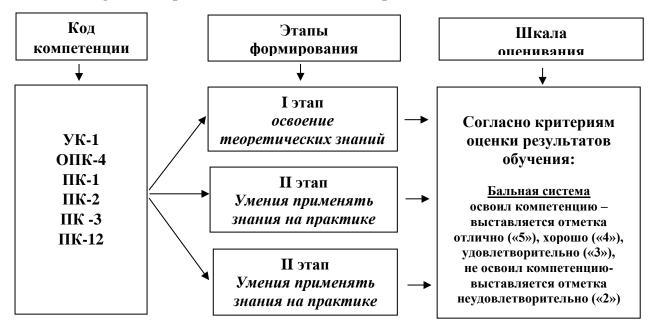
1.8 Requirements for the results of mastering the disciplineThe study of the discipline "Emergency conditions in therapy" is aimed at improving the following competencies: universal (UC) UC-1, general professional (GPC) GPC-4 and professional (PC) PC-1,2,3,12.

No. p/p	Code and name of competence	Code and name of the indicator of achievement of competence	
	Universal competencies		
1	UC-1. Capable of carrying out a critical analysis of problematic situations based on a systems approach, developing an action strategy	AI UC-1.1. Analyzes the problem situation based on a systems approach. AI UC-1.3. Applies systems analysis to resolve problematic situations in the professional sphere.	
		General professional competencie	
2	GPC-4 Capable of using medical products provided for by the procedure for providing medical care, as well as conducting patient examinations to establish a diagnosis	AI GPC-4.1. Uses modern medical technologies, specialized equipment and medical products, disinfectants, drugs, including immunobiological and other substances and their combinations when solving professional	
		Professional competencies	
No. p/p	Labor functions	Code and name of professional competence	Code and name of the indicator of achievement of competence
3	A/01.7 Diagnostics of diseases and (or) conditions in the profile of "therapy"	PC-1. Ability to collect and analyze complaints, life history, patient's disease history in order to establish a diagnosis and (or) condition according to the "therapy" profile PC-2. Ability to conduct a physical	AI PC-1.1. Collect complaints, medical history, and life history from a patient with a disease and/or condition in the "therapy" profile (or his/her legal representative) AI PC-1.2. Interpret and analyze information received from a patient with a disease and (or) condition in the profile "therapy" (or his legal representative) AI PC-2.1. Conduct a physical examination of the patient
		examination of a patient, analyze the results of additional examination methods	(inspection, palpation, percussion, auscultation) and interpret its results

in order to establish a diagnosis and (or)	AI PC-2.2. Justify the need and scope of laboratory and
condition in the "therapy" profile	instrumental examinations of a patient with a disease and
	(or) condition in the "therapy" profile
	AI PC-2.3. Conduct diagnostic manipulations and interpret
	the results obtained:
	- measurement of blood pressure in peripheral arteries;
	- blood glucose level test
	- ambulatory blood pressure monitoring (ABPM)
	- pulse oximetry
	- taking and decoding an electrocardiogram
	AI PC-2.4. Interpret the results of laboratory and
	instrumental examinations of patients
	AI PC-2.5. Justify the referral of a patient with a disease
	and (or) condition in the "therapy" profile to specialist
	doctors in the presence of medical indications, taking into
	account contraindications in accordance with the
	Procedures for the provision of medical care, clinical
	recommendations, taking into account the standards of
	medical care
	AI PC-2.6. Interpret conclusions received from medical
	specialists
	AI PC-2.7. Assess the severity of the disease and (or) the
	condition of the patient with the disease according to the
	profile "therapy"
	AI PC-2.8. Establish a diagnosis taking into account the
	ICD of a patient with a disease and (or) condition
	according to the profile "therapy"
	AI PC-2.9. Conduct differential diagnostics of diseases and
	(or) conditions in the "therapy" profile, using diagnostic
	algorithms (primary, concomitant and complications)
	taking into account the ICD
PC-3. Ability to determine medical	AI PC-3.1. Determine medical indications for providing
indications for hospitalization, indications	emergency, including emergency specialized, medical care
for providing emergency, including	AI PC-3.2. Determine medical indications for referring a
emergency specialized, medical care	patient for medical care in inpatient or day hospital settings

		providing specialized medical care in the "therapy" profile
		in case of difficulties in diagnosis and in the absence of the
		possibility of conducting additional examinations in
		outpatient settings
A/08.7. Provision of emergency and	PC-12. Ability to provide medical care in	AI PC -12.1. Recognize conditions requiring emergency
urgent medical care to patients	emergency and urgent situations	medical care, including clinical signs of sudden cessation
		of blood circulation and (or) breathing, requiring
		emergency and urgent medical care
		AI PC -12.2. Provide emergency medical care to patients in
		conditions that pose a threat to the life of patients,
		including clinical death (cessation of vital functions of the
		human body (circulation and (or) respiration)
		AI PC -12.3. Use medicinal products and medical devices
		when providing medical care to patients in emergency and
		urgent cases
		AI PC-12.4. Perform basic cardiopulmonary resuscitation

1.9 Stages of competencies formation and description of assessment scales



2. STRUCTURE AND CONTENT OF PRACTICE

2.1 Scope of practice

Scope of practice	
Total labor intensity of practice in hours, total	72
Total workload in credit units, total	2
Type of intermediate assessment	credit
	with
	grade

2.2 Type of practice

Type of practice: industrial.

Industrial practice is a mandatory section of the educational process, directly focused on the professional and practical training of students. When implementing the program, attention is paid to the students' development of the proposed list of mandatory practical skills.

Forms of organization of practice: Section 1 "Skills of general medical manipulations" of industrial practice provides for work in the Accreditation and Simulation Center of the Academy (hereinafter ASC), where students practice practical skills of emergency medical care on simulators, dummies, and robotic simulators.

Forms of organization of practice: Section 2 "Emergency medical care in healthcare organizations" of industrial practice provides for the student's work in the intensive care and intensive care departments for patients of various profiles in healthcare institutions, by participating in providing assistance to patients in emergency and urgent forms.

2.3 Criteria for assessing students' knowledge

The assessment of learning outcomes is carried out in accordance with the "Regulations on the assessment system for the learning outcomes of students of the Federal State Budgetary Educational Institution of Higher Education Amur State Medical Academy of the Ministry of Health of Russia".

Success in mastering practical skills and abilities is characterized by a qualitative assessment and is assessed on a 5-point system: "5" - excellent, "4" - good, "3" - satisfactory, "2" - unsatisfactory.

Assessment criteria for the practical part

- "5" the student has fully mastered the practical skills and abilities provided for by the work program of the internship, followed all assigned instructions; there are no complaints from the medical staff and patients of the department.
- "4" the student has mastered the practical skills and abilities provided for by the work program of the internship, but allows some inaccuracies, followed all the assigned instructions, but with minor comments from the medical staff; there are no complaints from the patients of the department.
- "3" the student has only some practical skills and abilities, carried out all assigned instructions carelessly, there were minor comments from the medical staff; there are no complaints from the patients in the department.
- "2" the student has only some practical skills and abilities, performs them with gross errors, carried out all assigned instructions carelessly, there were rude comments from the medical staff; there were complaints from the patients of the department.

Criteria for assessing the theoretical part

The mark "5" is received by the student if he demonstrates a deep and complete mastery of the content of the educational material, correctly and logically presents the answer, is able to connect theory with practice, express and substantiate his judgments, and formulates independent conclusions and generalizations when answering.

The mark "4" is received by the student if he has fully mastered the educational material, navigates the studied material consciously, applies knowledge to solve practical problems, correctly presents the answer, but the content and form of the answer have some inaccuracies or the answer is incomplete.

The mark "3" is given to a student if he/she demonstrates knowledge and understanding of the basic provisions of the educational material, but presents it incompletely, inconsistently, makes inaccuracies, and is unable to substantiate his/her judgments with evidence.

The mark "2" is given to a student if he has fragmented, unsystematic knowledge, is unable to distinguish between the main and the secondary, presents the material in a disorderly and uncertain manner, and cannot apply knowledge to solve practical problems.

The final assessment is made up of the assessment of the practical and theoretical parts.

Assessment criteria for midterm assessment

The basis for determining the level of knowledge, skills, and abilities are the assessment criteria:

- completeness and correctness:
- correct, precise answer;
- correct but incomplete or imprecise answer;
- incorrect answer;
- no answer.

When assigning marks, the classification of errors and their quality are taken into account:

- gross errors;
- similar errors:
- minor errors;
- shortcomings.

<u>Interim certification is carried out in 3 stages:</u>

- 1. Test control in the "Moodle" system.
- 2. Passing practical skills (competencies).
- 3. Interview on theoretical questions for the test.

Test control evaluation criteria

Criteria for final assessment (midterm assessment)

- "5" excellent for the depth and completeness of mastery of the content of the educational material, in which the student easily navigates, for the ability to connect theoretical questions with practical ones, express and justify their judgments, correctly and logically present the answer; when testing, allows up to 10% of erroneous answers. Practical skills and abilities provided for by the work program of practice are fully mastered.
- "4" good the student has fully mastered the educational material, is oriented in it, correctly states the answer, but the content and form have some inaccuracies; during testing allows up to 20% of erroneous answers. Has fully mastered the practical skills and abilities provided by the work program of practice, but allows some inaccuracies
- "3" satisfactory the student has mastered the knowledge and understanding of the main provisions of the educational material, but presents it incompletely, inconsistently, does not know how to express and justify his/her judgments; during testing, allows up to 30% of erroneous answers. Has only some practical skills and abilities.
- "2" unsatisfactory the student has fragmented and unsystematic knowledge of the educational material, is unable to distinguish between the main and secondary, makes mistakes in defining concepts, distorts their meaning, presents the material in a disorderly and uncertain manner, and makes more than 30% of erroneous answers during testing. Performs practical skills and abilities with gross errors.

3 EDUCATIONAL, METHODOLOGICAL, LOGISTICAL AND INFORMATIONAL SUPPORT FOR INTERNSHIPS

3.1 Main literature

N	Name	Access mode
0.		
1.	Sumin S.A. Emergency conditions: textbook . 7th edition,	Printed
	revised and enlarged. – M.: OOO MIA, 2010. – 960 p.	
2.	Sumin S.A. Anesthesiology and resuscitation: in 2 volumes -	Printed
	M.: MIA LLC, 2010 T.1. – 928 pp., T. 2. – 872s.	
3.	Emergency medical care [Electronic resource] / Vertkin A.L.	http://www.studmedlib.ru/b
	– M .: GEOTAR-Media, 2007. – 368 p.: ill. – ISBN 978-5-	ook/ISBN9785970405222.h
	9704-0522-2 . –	<u>tml</u>
4.	Fundamentals of resuscitation [Electronic resource]:	http://www.studmedlib.ru/b
	textbook / Sumin S.A., Okunskaya T.V. – M.: GEOTAR-	ook/ISBN9785970424247.h
	Media, 2013. – 688 p. – ISBN 978-5-9704-2424-7.	<u>tml</u>
5.	Anesthesiology and Intensive Care: A Practical Guide	http://www.studmedlib.ru/b
	[Electronic resource] / Edited by Corresponding Member of	ook/ISBN9785423500467.h
	the Russian Academy of Medical Sciences, Professor B.R.	tml
	Gelfand . – 2nd ed., corrected and supplemented. – Moscow:	
	Litterra, 2012. – 640 p. –	

3.2 Further reading

N	Name	Access mode
0.		

[&]quot;5" excellent - 90-100% correct answers

[&]quot;4" is good - 80-89% correct answers

[&]quot;3" satisfactory - 70-79% correct answers

[&]quot;2" is unsatisfactory – less than 70% of correct answers.

1.	Intensive care: national guidelines: in 2 volumes/edited by	Printed
	B.R. Gelfand, A.I. Saltanov. – M.: GEOTAR-Media, 2011.	
	– V.2. – 784 p. – (Series "National Guidelines").	
2.	Anesthesiology: national guidelines/edited by A.A.	Printed
	Bunyatyan, V.M. Mizikov. – M.: GEOTAR-Media, 2011.	
	– 1104 p. – (Series "National Guidelines").	
3.	Emergency care for diseases of internal organs at the pre-	Printed
	hospital stage: manual for doctors / edited by V.A. Galkin	
	M .: OOO "MIA", 2009 200 p.	
4.	Emergency care in therapy and cardiology / edited by Yu. I.	Printed
	Grinshtein M.: GEOTAR-Media, 2009 224 p.	
5.	Syncopal conditions in clinical practice / ed . S.B. Shustova .	Printed
	− St. Petersburg : ELBI, 2009. − 336 p.	
6.	Anesthesiology and resuscitation [Electronic resource]:	http://www.studmedlib.ru/b
	textbook / Edited by O.A. Dolina . – 4th ed ., revised and	ook/ISBN9785970410332.h
	enlarged . – M.: GEOTAR- Media , 2009. – 576 p. – ISBN	<u>tml</u>
	978-5-9704-1033-2 – Access mode :	
7.	Anesthesiology and intensive care: A practical guide [http://www.studmedlib.ru/b
	Electronic resource] / Edited by Corresponding Member of	ook/ISBN9785423500467.h
	the Russian Academy of Medical Sciences, Professor B.R.	<u>tml</u>
	Gelfand . – 2nd ed ., corrected and enlarged . – Moscow:	
	Litterra, 2012. – 640 p. – Access mode:	
8.	Modern approaches to solving the problem of sudden	http://www.studmedlib.ru/b
	cardiac death [Electronic resource] / V. V. Rezvan , N. V.	ook/ISBN9785970425343.h
	Strizhova, A. V. Tarasov; edited by L. I. Dvoretsky M.:	<u>tml</u>
	GEOTAR- Media, 2015 96 p ISBN 978-5-9704-2534-3.	
	- Access mode :	

3.3 Educational and methodological support for practice, prepared by the staff of the department

	ucpui imeni			
N	Name	Access mode		
ο.				
1.	Video lecture "Secondary comas. Differential diagnostics" -	https://educ-		
	Oleksik V.S.	amursma.ru/course/view.p		
		<u>hp?id=53</u>		
2.	Video lecture "Modern approaches to CPR" - Khodus S.V.	https://educ-		
		amursma.ru/course/view.p		
		<u>hp?id=53</u>		
3.	Video lecture "Shock. General principles of therapy.	https://educ-		
	Cardiogenic shock" - Khodus S.V.	amursma.ru/course/view.p		
		<u>hp?id=53</u>		
4.	Video lecture "Anaphylactic shock" - Khodus S.V.	https://educ-		
		amursma.ru/course/view.p		
		<u>hp?id=53</u>		
5.	Electronic interactive presentation "Acute respiratory	https://educ-		
	failure, methods of restoring the patency of the upper	amursma.ru/course/view.p		
	respiratory tract" - Khodus S.V.	hp?id=53		
6.	Electronic interactive presentation "Bronchial asthma.	https://educ-		
	Severe exacerbation" - Oleksik V.S.	amursma.ru/course/view.p		
		<u>hp?id=53</u>		

7.	Electronic interactive presentation " Life-threatening	https://educ-
	disturbances of cardiac rhythm and conduction" - Oleksik	amursma.ru/course/view.p
	V.S.	hp?id=53

3.4 Material and technical base for conducting internships

Education students (Section 1) production practices is being carried out on ASC base using next equipment :

Name of premises	Equipment of premises
Debriefing room #3, Accreditation and Simulation Center (room #5, 3rd floor), 675006, Blagoveshchensk, Gorky St., 101	Teacher's desk - 1 pc., educational table - 8 pcs., chair - 18 pcs., video monitoring and recording system for the simulation training process - 1 pc.
Intensive care unit, Accreditation and simulation center (room 2, 3rd floor) 675006, Blagoveshchensk, Gorky st., 101	Table - 1 pc., video monitoring and recording system for simulation training - 1 pc., medical bed - 1 pc., bedside table - 1 pc., medical table - 1 pc., procedure table - 1 pc., changing table - 2 pcs., patient simulator simulating an adult man for training ECG skills - 1 pc., robot simulator for training advanced cardiopulmonary resuscitation skills - 1 pc., CPR mannequin - 3 pcs., pulse oximeter - 1 pc., airway management simulator - 1 pc., Heimlich maneuver training simulator - 1 pc., adult resuscitation simulator - 1 pc., training defibrillator - 1 pc., resuscitation phantom - 1 pc., defibrillator - monitor DKI-N-10 " Axion " - 1 pc., Defibrillator TES-7511k 1 pc., Airway Patency Restoration Trainer - 1 pc., Ozhivlennaya Anna Mannequin-Trainer - 3 pcs., Powerheart G5 Automatic External Defibrillation Trainer - 1 pc., CardiaInternational Training Defibrillator - 1 pc., Ambu-type Bag - 3 pcs., Electric Ventilator - 1 pc., Laryngoscope with a Set of Blades - 1 pc., Resuscitation Phantom - 1 pc., YX 300 Pulse Oximeter - 1 pc., Glucometer - 1 pc., Steel Stand-Tripod for IV Infusions - 3 pcs.

Education students (Section 2) production practices is being carried out on bases of resuscitation departments and intensive care units of healthcare institutions in the city of Blagoveshchensk (State Healthcare Institution of the AO AOKB, State Healthcare Institution of the AO BGKB, State Healthcare Institution of the AO AOODKB) using their equipment and facilities.

3.5 Professional databases, information and reference systems, electronic educational resources

No. p/p	Resource name	Resource Description	Access	Resource address
		Electronic library systems		
1	"Student Consultant" 1 Electronic library of the medical university. For students and teachers of medical and pharmaceutical universities. Provides access to electronic versions of textbooks, teaching aids and periodicals.		library, individual access	http://www.studmedlib.ru/
2	The materials posted in the library have leveloped by leading Russian specialist "Doctor's based on modern scientific knowledg (evidence-based medicine). The information of the consultant of t		library, individual access	http://www.r osmedlib.ru/c gi-bin/mb4x

		motorials have undersone meandatem		<u> </u>
	materials have undergone mandatory independent review.			
Free search engine in the largest medical bibliographic database MedLine . Documents medical and biological articles from the specialized literature, and also provides links to full-text articles.		library, free access	http:// www. ncbi.nlm.nih . gov/ pubmed	
OxfordMedicineO nline . publications, bringing together over into a single, cross-searchable re Publications include The Oxford For Clinical Medicine and The Control Textbook of Medicine with electric control of the		A collection of Oxford Press medical publications, bringing together over 350 titles into a single, cross-searchable resource. Publications include The Oxford Handbook of Clinical Medicine and The Oxford Textbook of Medicine, with electronic versions continually updated.	library, free access	http://www.o xfordmedicin e.com
5	Reference information on physiology, cell biology, genetics, biochemistry,		library, free access	http://humbio .ru/
6	Medical online library	Free reference books, encyclopedias, books, monographs, abstracts, English-language literature, tests.	library, free access	http://med- lib.ru/
		Information systems		
7	Russian Medical Association	Professional Internet resource. Objective: to promote effective professional activity of medical personnel. Contains the charter, personnel, structure, rules of entry, information about the Russian Medical Union.	library, free access	http://www.r mass.ru/
The site presents a catalog of profession medical resources, including links to most authoritative subject sites, journ societies, as well as useful documents programs. The site is intended for documents		The site presents a catalog of professional medical resources, including links to the most authoritative subject sites, journals, societies, as well as useful documents and programs. The site is intended for doctors, students, employees of medical universities and scientific institutions.	library, free access	http: //webmed.irk utsk.ru/
Databases				
		Organization, fact sheets, reports, WHO	library, free access	http://www.w ho.int/ru/
Ministry of Science and The website of the Ministry of Science and		library, free access	http://www.m inobrnauki.go v.ru	
11	Ministry of The website of the Ministry of Education of Education of the the Russian Federation contains news library free		library, free access	https://edu.go v.ru/
12	Federal portal A single window for access to educational resources. This portal provides access to		library, free access	http://www. edu.ru/ http://window .edu.ru/catalo g/?p rubr =2.2.81.1

	500				
	Bibliographic databases				
Database 13 "Russian Medicine"		It is created in the Central Scientific and Methodological Library and covers the entire collection, starting from 1988. The database contains bibliographic descriptions of articles from domestic journals and collections, dissertations and their abstracts, as well as domestic and foreign books, collections of institute proceedings, conference materials, etc. Thematically, the database covers all areas of medicine and related areas of biology, biophysics, biochemistry, psychology, etc.	library, free access	http://www.s csml.rssi.ru/	
14	Russian information portal in the field of science technology, medicine and education, containing abstracts and full texts of more than 13 million scientific articles and publications. The		library, free access	http://elibrary .ru/defaultx.a Sp	
15	Portal Electronic library of dissertations Currently, the Electronic Library of Dissertations of the Russian State Library contains more than 919,000 full texts of dissertations and abstracts.		library, free access	http://diss.rsl. ru/?menu=dis scatalog/	
16	Medical and biological portal for specialists. Biomedical journal. Last updated February 7, 2021.		library, free access	http://www.m edline.ru	

${\bf 3.6}$ Licensed and freely distributed software used in the educational process

Licensed and freely distributed software

No.	List of software (commercial	Details of supporting documents
p/p	software products)	
1.	MS Operating System Windows 7	License number 48381779
	Pro	
2.	MS Operating System Windows 10	CONTRACT No. UT-368 from 09.21.2021
	Pro	
3.	MS Office	License number: 43234783, 67810502,
		67580703, 64399692, 62795141, 61350919
4.	Kaspersky Endpoint Security for	Agreement 326po/21-IB dated November
	business Extended	26, 2021
5.	1C Accounting and 1C Salary	LICENSE AGREEMENT 612/L dated
		02.02.2022
6.	1C: PROF University	LICENSE AGREEMENT No. ЦБ-1151
		dated 01.14.2022
7.	1C: PROF Library	LICENSE AGREEMENT No. 2281 dated
		11.11.2020
8.	Consultant Plus	Agreement No. 37/C dated 02/25/2022
9.	Aktion 360	Agreement No. 574 dated November 16,
		2021
10.	E-learning environment 3 KL (Agreement No. 1362.2 dated November 15,
	Russian Moodle)	2021
11.	Astra Linux Common Edition	Agreement No. 142 A dated September 21,
		2021
12.	Information system "Plans"	Agreement No. 8245 dated 06/07/2021

13.	1 C:Document flow	Agreement No. 2191 dated 10/15/2020
14.	R7-Office	Agreement No. 2 KS dated 12/18/2020

Scroll free distributed software provision

No. p/p	List of freely distributed software	Links to license agreement
1.	Yandex Browser	For free distributed
		Licensed agreement on usage programs
		Browser " Yandex "
		https://yandex.ru/legal/browser agreement/
2.	Yandex.Telemost	For free distributed
		Licensed agreement on usage programs
		https://yandex.ru/legal/telemost_mobile_agr
		eement/
3.	Dr.Web CureIt!	For free distributed
		Licensed agreement:
		https://st.drweb.com/static/new-
		www/files/license_CureIt_ru.pdf
4.	OpenOffice	Freely distributed
		License:
		http://www.gnu.org/copyleft/lesser.html
5.	LibreOffice	Freely distributed
		License: https://ru.libreoffice.org/about-
		us/license/

3.7 Resources of the information and telecommunications network "Internet"

- Ministry of Health of the Russian Federation. Standards of primary health care https://www.rosminzdrav.ru/ministry/61/22/stranitsa-979/stranitsa-983/1-standarty-pervichnoy-mediko-sanitarnoy-pomoschi
- Ministry of Health of the Russian Federation. Standards of specialized medical care https://www.rosminzdrav.ru/ministry/61/22/stranitsa-979/stranitsa-983/2-standarty-spetsializirovannoy-meditsinskoy-pomoschi
- Ministry of Health of the Russian Federation. Procedures for providing medical care to the population of the Russian Federation -https://www.rosminzdrav.ru/ministry/61/4/stranitsa-857/poryadki-okazaniya-meditsinskoy-pomoschi-naseleniyu-rossiyskoy-federatsii
- Federal Electronic Medical Library (Ministry of Health of the Russian Federation) http://www.femb.ru
- Student consultant (Electronic library of the higher educational institution) http://old.studmedlib.ru/ru/index.html
- Electronic library system "Medical library "MEDLIB.RU" http://www.medlib.ru/
- Amur State Medical Academy (Electronic educational resources) http://www.amursma.ru/obuchenie/biblioteki/elektronnye-obrazovatelnye-resursy/
- Clinical recommendations of the RKO approved by the scientific and practical council of
 the Ministry of Health of the Russian Federation "Arterial hypertension in adults":
 https://scardio.ru/rekomendacii/rekomendacii_rko_odobrennye_nauchnoprakticheskim_s
 ovetom minzdrava rf/
- Clinical recommendations of the RCO approved by the scientific and practical council of the Ministry of Health of the Russian Federation "Acute myocardial infarction with ST segment elevation of the electrocardiogram" and "Acute coronary syndrome without ST segment elevation of the electrocardiogram":

https://scardio.ru/rekomendacii/rekomendacii_rko_odobrennye_nauchnoprakticheskim_s ovetom_minzdrava_rf/

- Clinical recommendations of the RKO approved by the scientific and practical council of the Ministry of Health of the Russian Federation "Bradyarrhythmia and conduction disorders":
 - https://scardio.ru/rekomendacii/rekomendacii_rko_odobrennye_nauchnoprakticheskim_s ovetom_minzdrava_rf/
- Clinical guidelines "Anaphylactic shock" All-Russian public organization "Federation of anesthesiologists and resuscitators ", Russian association of allergists and clinical immunologists http://www.far.org.ru/recomendation

4. EVALUATION FUND

4.1 Examples of test tasks for intermediate knowledge control

The test control is carried out on a single information and educational portal in the Moodle system https://educ-amursma.ru, by randomly generating an individual version containing 100 questions from the question bank (200 questions).

EXAMPLES OF TEST TASKS:

CHOOSE ONE CORRECT ANSWER

- 1. AN ABSOLUTE CONTRAINDICATION FOR THE USE OF B-ADRENERGY RECEPTOR BLOCKERS IS
 - 1) myocardial infarction
 - 2) chronic hepatitis C
 - 3) severe obstructive pulmonary disease
 - 4) iron deficiency anemia
- 2. THE GAS WILL DIFFUSE THROUGH THE PERMEABLE MEMBRANE
 - 1) from a site with a larger volume to a site with a smaller volume
 - 2) from a high pressure area to a low pressure area
 - 3) from a site with a smaller volume to a site with a larger volume
 - 4) from a low pressure area to a high pressure area
- 3. RESTRICTIVE RESPIRATORY FAILURE DEVELOPES WHEN
 - 1) obstruction of the bronchial tree
 - 2) lung tissue resections
 - 3) decreased elasticity of lung tissue
 - 4) violation of the integrity of the chest

Answer standards: 1-3; 2-2; 3-3

4.2 List of practical skills that a student should have after completing an internship

- 1. Perform an intravenous injection
- 2. Perform an intramuscular injection
- 3. Insert a gastric tube and perform gastric lavage
- 4. Perform temporary cessation of arterial bleeding using a tourniquet
- 5. To temporarily stop venous bleeding
- 6. Perform decompression of the pleural cavity in case of tension pneumothorax
- 7. Place oropharyngeal and nasopharyngeal airways
- 8. Install a laryngeal mask (laryngeal tube)
- 9. Apply a splint for transport immobilization to a patient with an upper limb fracture
- 10. Apply a splint for transport immobilization to a patient with a lower limb fracture
- 11. Demonstrate the technique of transferring a patient to a spinal transport board and subsequent transportation
- 12. Conduct transport immobilization of the cervical spine

4.3 List of questions for the test

- 1. Algorithm for examining a patient in critical condition "ABCDE".
- 2. Main disorders of vital functions related to breathing (apnea, pathological rhythms). Disturbances in airway patency.
- 3. Disorders of the respiratory system revealed during objective examination (percussion, palpation).
- 4. The main disorders of vital functions from the circulatory system (collapse, shock, cardiac and vascular failure).
- 5. Main disorders of vital functions from the side of consciousness (delirium, stupor, coma).
- 6. Methods of restoring airway patency.
- 7. Diagnosis of shock conditions.
- 8. General measures for providing emergency medical care (patient position, oxygen therapy, infusion therapy)
- 9. Methods of restoring airway patency.
- 10. ECG rhythms of sudden circulatory arrest.
- 11. Methodology for using AND.
- 12. Principles of emergency medical care for ACS and its complications (cardiogenic shock, pulmonary edema).
- 13. First aid for hemorrhagic stroke
- 14. First aid for ischemic stroke.
- 15. Tactics of antihypertensive therapy for stroke.
- 16. Algorithm for providing first medical aid in case of anaphylactic shock.
- 17. Internal bleeding. Diagnostics. First aid.
- 18. Emergency care for life-threatening exacerbation of bronchial asthma.
- 19. Emergency care for foreign bodies in the upper respiratory tract.
- 20. First aid for hypoglycemic and hyperglycemic coma.

APPROVED

at a meeting of the Department of Anesthesiology and Resuscitation, intensive care and emergency medical care
Protocol No. 8 of 04/08/2022
Head of Department _____ S. V.
Khodus

ADDITIONS AND CHANGES TO THE INDUSTRIAL PRACTICE "PRACTICE IN EMERGENCY MEDICAL MANIPULATIONS" SPECIALTY 31.05.01 MEDICAL PRACTICE FOR THE 2022-2023 ACADEMIC YEAR

1. Make changes to Articles 17, 18, update the table in Section 3.6 "Licensed and freely distributed software used in the educational process"

	I . Commercial software products			
1.	MS Operating System Windows 7 Pro	License number 48381779		
2.	MS Operating System Windows 10 Pro	CONTRACT No. UT-368 from 09.21.2021		
3.	MS Office	License number: 43234783, 67810502, 67580703, 64399692, 62795141, 61350919		
4.	Kaspersky Endpoint Security for business Extended	Agreement 326po/21-IB dated November 26, 2021		
5.	1C Accounting and 1C Salary	LICENSE AGREEMENT 612/L dated 02.02.2022		
6.	1C: PROF University	LICENSE AGREEMENT No. ЦБ-1151 dated 01.14.2022		
7.	1C: PROF Library	LICENSE AGREEMENT No. 2281 dated 11.11.2020		
8.	Consultant Plus	Agreement No. 37/C dated 02/25/2022		
9.	Aktion 360	Agreement No. 574 dated November 16, 2021		
10.	E-learning environment 3 KL (Russian Moodle)	Agreement No. 1362.2 dated November 15, 2021		
11.	Astra Linux Common Edition	Agreement No. 142 A dated September 21, 2021		
12.	Information system "Plans"	Agreement No. 8245 dated 06/07/2021		
13.	1 C:Document flow	Agreement No. 2191 dated 10/15/2020		

14.	R7-Office	Agreement No. 2 KS dated 12/18/2020			
	II . Freely distributed software				
1.	Yandex Browser	Freely distributed License Agreement for the use of Yandex Browser programs https://yandex.ru/legal/browser_agreement/			
2.	Yandex.Telemost	Freely distributed License Agreement for the use of programs https://yandex.ru/legal/telemost_mobile_agreement/			
3.	Dr.Web CureIt!	Freely distributed License Agreement: https://st.drweb.com/static/new- www/files/license_CureIt_ru.pdf			
4.	OpenOffice	Freely distributable License: http://www.gnu.org/copyleft/lesser.html			
5.	LibreOffice	Freely distributed License: https://ru.libreoffice.org/about-us/license/			

APPROVED

ADDITIONS AND CHANGES TO THE INDUSTRIAL PRACTICE "PRACTICE IN EMERGENCY MEDICAL MANIPULATIONS" SPECIALTY 31.05.01 MEDICAL PRACTICE FOR THE 2023-2024 ACADEMIC YEAR

1. Make a change to Articles 17, 18, update the table in the section "Licensed and freely distributed software used in the educational process".

List of software (commercial software products)

No.	List of software (commercial software products)	Details of supporting documents
1	MS Operating System Windows 7 Pro	License number 48381779
2	MS Operating System Windows 10 Pro	CONTRACT No. UT-368 from 09.21.2021
3	MS Office	License number: 43234783, 67810502, 67580703, 64399692, 62795141, 61350919
4	Kaspersky Endpoint Security for business – Standard Russian Edition. 50-99 Node 2 year Educational Renewal License	Agreement 165A dated November 25, 2022
5	1C Accounting and 1C Salary	LICENSE AGREEMENT 612/L dated 02.02.2022
6	1C: PROF University	LICENSE AGREEMENT No. ЦБ-1151 dated 01.14.2022
7	1C: PROF Library	LICENSE AGREEMENT No. 2281 dated 11.11.2020
8	Consultant Plus	Agreement No. 37/C dated 02/25/2022
9	Contour.Tolk	Agreement No. K007556/22 dated 09/19/2022
10	E-learning environment 3 KL (Russian Moodle)	Agreement No. 1362.3 dated November 21, 2022
11	Astra Linux Common Edition	Agreement No. 142 A dated September 21, 2021

12	2 Information system "Plans"	Agreement No. 9463 dated May 25, 2022
13	3 1C: Document Management	Agreement No. 2191 dated 10/15/2020
14	R7-Office	Agreement No. 2 KS dated 12/18/2020

List of freely distributed software

No.	List of freely distributed software	Links to license agreement
1	Yandex Browser	Freely distributed License agreement for the use of Yandex Browser programs https://yandex.ru/legal/browser_agreement/
2	Yandex.Telemost	Freely distributed License Agreement for the Use of Programs https://yandex.ru/legal/telemost_mobile_agreement/
3	Dr.Web CureIt!	Freely distributed License Agreement: https://st.drweb.com/static/new-www/files/license_CureIt_ru.pdf
4	OpenOffice	Freely distributed License: http://www.gnu.org/copyleft/lesser.html
5	LibreOffice	Freely distributed License: https://ru.libreoffice.org/about-us/license/
6	VK Calls	Freely distributed https://vk.com/license