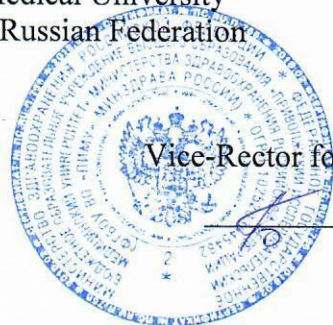


Federal State Budgetary Educational Institution of Higher Education  
"Privolzhsky Research Medical University"  
Ministry of Health of the Russian Federation



APPROVED

Vice-Rector for Academic Affairs

E.S. Bogomolova

31 August 2021

**WORKING PROGRAM**

Name of the academic discipline: **EMERGENCY CARE**

Specialty: **DENTISTRY (31.05.03)**  
(code, name)

Qualification: **DENTIST**

Department: **ANESTHESIOLOGY, RESUSCITATION AND TRANSFUSIOLOGY**

Mode of study: **FULL-TIME**

Labor intensity of the academic discipline: **72 academic hours**

The work program was developed in accordance with the Federal State Educational Standard for the specialty: 31.05.03 "DENTISTRY" (specialty level), approved by Order of the Ministry of Science and Higher Education of the Russian Federation No. 984 of August 12, 2020.

**Developers of the working program:**

Pichugin V.V. Doctor of Medical Sciences, Professor, Professor of the Department of Anesthesiology, Resuscitation and Transfusiology

Fedorov M.E. Candidate of Medical Sciences, Associate Professor of the Department of Anesthesiology, Resuscitation and Transfusiology

The program was reviewed and approved at the department meeting (protocol No.7, 30.08.21)  
Head of the Department,

MD O.V. Voennov \_\_\_\_\_ (OV Voennov)  
(signature)

30 August 2021

AGREED

Deputy Head of EMA ph.d. of biology \_\_\_\_\_ Lovtsova L.V.  
(signature)

30 August 2021

## **1. The purpose and objectives of mastering the academic discipline\_\_\_\_\_ EMERGENCY CARE (hereinafter – the discipline):**

1.1. The purpose of mastering the discipline: *participation in the formation of competencies: UC-8, GPC-5*

1.2. Tasks of the discipline:

1. methods of examination of the resuscitation patient
2. the main methods of the resuscitation, first aid and intensive therapy of patients with the most common syndromes

1.3. Requirements to the deliverables of mastering the discipline

As a result of completing the discipline, the student should

### **Know:**

- methods of examination of the resuscitation patient;
- clinical manifestations of the main syndromes of impaired vital activity of the body;
- the main methods of intensive therapy of patients with the most common syndromes;
- the main methods of first aid of patients with the most common syndromes
- features of first aid to victims in emergency situations

### **Be able to:**

- conduct an examination of a patient in critical condition;
- to evaluate the data of laboratory methods of examination of the resuscitation patient;
- evaluate the data of instrumental survey methods;
- determine clinical death and other terminal conditions;
- perform cardiopulmonary resuscitation;
- provide first aid in case of emergency and life-threatening conditions;
- diagnose the main syndromes (acute lung injury syndrome-NOZZLE, acute cardiovascular insufficiency - OSS, endogenous intoxication, pain syndrome, cerebral insufficiency syndromes);
- determine indications for substitution therapy and carry it out in the main life-threatening conditions;

### **Possess:**

- skills of examination of a patient in critical condition;
- skills of non-invasive provision of airway patency;
- skills of oxygen therapy with nasopharyngeal catheters and masks;
- skills in diagnosing clinical death;
- skills of conducting indirect heart massage;
- the skills of performing artificial lung ventilation by expiratory methods and the simplest breathing apparatus, taking into account age characteristics;
- skills of conducting drug therapy during cardiopulmonary resuscitation;
- skills of electrical defibrillation in adults;
- skills of rehabilitation of the tracheobronchial tree with the help of electro – and mechanical suction;
- first aid skills in emergency and life-threatening conditions;

## **2. Position of the academic discipline in the structure of the General Educational Program of Higher Education (GEP HE) of the organization.**

**2.1.** 2.1 The discipline "Emergency care" refers to the basic part of the cycle of block B1.U00.12. specialty: 31.05.03 "DENTISTRY" (specialty level), approved by Order of the Ministry of Science and Higher Education of the Russian Federation No. 984 of August 12, 2020. The

discipline is studied in the 9th semesters.

**2.2. The following knowledge, skills and abilities formed by previous academic disciplines are required for mastering the discipline:** Human anatomy; histology; physiology; microbiology; life safety. Emergency medicine; pathology; pathological anatomy; pharmacology; first aid; clinical pharmacology with the basics of pharmacotherapy.

**3. Deliverables of mastering the academic discipline and metrics of competence acquisition**

Mastering the discipline aims at acquiring the following universal (UC) or/and general professional (GPC)

№	Competence code	The content of the competence (or its part)	Code and name of the competence acquisition metric	As a result of mastering the discipline, the students should:		
				know	be able to	possess
1.	UC-8.	Able to create and support in everyday life and in professional activity, safe living conditions for the preservation of the natural environment, ensuring the sustainable development of society, including in case of threat and occurrence of emergency situations and military conflicts	UC-8.1. Analyzes the factors of harmful influence on the vital activity of the elements of the habitat (technical means, technological processes, materials, buildings and structures, natural and social phenomena) UC-8.2. Identifies dangerous and harmful factors within the framework of the activity UC-8.3. Solves problems related to safety violations and participates in prevention activities of emergencies in the workplace UC-8.4. Observes and explains rules of conduct in the event of emergencies of natural and man-made origin, provides first aid	-features of first aid to victims, in emergency situations and in centers of mass destruction ; - methods of examination of the resuscitation patient; - clinical manifestations of the main syndromes of impaired vital activity of the body	-to conduct an examination of a patient in critical condition; -determine clinical death and other terminal conditions; -perform cardiopulmonary resuscitation; -provide first aid in case of emergency and life-threatening conditions;	- skills of examination of a patient in a critical condition; - first aid skills in emergency and life-threatening conditions. - skills in diagnosing clinical death; - skills of conducting indirect heart massage; skills of artificial lung ventilation.
2.	GPC-5.	GPC-5. Able to provide first aid on	GPC-5.1. Establishes the	- methods of	-to conduct an	- skills of examination

		<p>the territory of a pharmaceutical organization in case of emergency conditions for visitors before the arrival of an ambulance team</p>	<p>fact of the occurrence of an emergency condition of a visitor of a pharmacy organization, in which it is necessary to provide first aid GPC-5.2. Conducts measures to provide first aid to visitors in case of emergency conditions before the arrival of the ambulance team</p>	<p>examination of a patient in critical condition; - clinical manifestations of the main syndromes of impaired vital activity of the body; -the main methods of intensive therapy of patients with the most common syndromes ; -features of first aid to victims, in emergency situations and in centers of mass destruction ;</p>	<p>examination of a patient in critical condition; - determine clinical death and other terminal conditions; -perform cardiopulmonary resuscitation; -provide first aid in case of emergency and life-threatening conditions; -diagnose the main syndromes ( acute respiratory failure syndrome - ODN, acute cardiovascular insufficiency - OSN, restore airway patency by non-invasive and invasive methods;</p>	<p>of a patient in a critical condition; - skills of non-invasive airway patency; - skills of oxygen therapy with nasopharyngeal catheters and masks; - skills in diagnosing clinical death; - skills of conducting indirect heart massage; - the skills of performing artificial lung ventilation by expiratory methods and the simplest breathing apparatus, taking into account age characteristics; - skills of conducting drug therapy during cardiopulmonary resuscitation; - skills of electrical defibrillation in adults; - first aid skills in emergency and life-threatening conditions.</p>
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**4. Sections of the academic discipline and competencies that are formed when mastering them**

№	Competence code	Section name of the discipline	The content of the section in teaching units
1	UC8 GHC5	Emergency care in cardiology	0,33
2	UC8 GHC5	Assistance in stopping blood circulation and breathing.	0,33
3	UC8 GHC5	Acute respiratory disorders	0,33
4	UC8 GHC5	Emergency conditions in allergology	0,33
5	UC8 GHC5	Providing assistance for disorders of consciousness.	0,33
6	UC8 GHC5	First aid in case of traumatic injury	0,33

**5. Volume of the academic discipline and types of academic work**

Type of educational work	Labor intensity		Labor intensity (AH) in semesters	
	volume in credit units (CU)	volume in academic hours (AH)	№9	№10
Classroom work, including	1,5	54	54	
Lectures (L)		12	12	
Laboratory practicum (LP)*				
Practicals (P)		36	36	
Seminars (S)				
Student's individual work (SIW)	0,5	24	24	
Mid-term assessment				
credit/exam ( <i>specify the type</i> )			credit	
<b>TOTAL LABOR INTENSITY</b>	<b>2</b>	<b>72</b>	<b>72</b>	

**6. Content of the academic discipline**

**6.1. Sections of the discipline and types of academic work**

№	Name of the section of the academic discipline	Types of academic work* (in AH)					
		L	LP	P	S	SIW	total
1	Emergency care in cardiology	2		6		4	12
2	Assistance in stopping blood circulation and breathing.	2		6		4	12
3	Acute respiratory disorders	2		6		4	12
4	Emergency conditions in allergology	2		6		4	12
5	Providing assistance for disorders of consciousness	2		6		4	12
6	First aid in case of traumatic injury	2		6		4	12
	<b>TOTAL/72</b>	<b>12</b>		<b>36</b>		<b>24</b>	<b>72</b>

\* - L – lectures; LP – laboratory practicum; P – practicals; S – seminars; SIW – student’s individual work.

6.2. Thematic schedule of educational work types:

6.2.1 Thematic schedule of lectures

№	Name of lecture topics	Volume in AH	
		semester 9	semester 10
1	Emergency care in cardiology	2	
2	Assistance in stopping blood circulation and breathing.	2	
3	Acute respiratory disorders	2	
4	Emergency conditions in allergology	2	
5	Providing assistance for disorders of consciousness	2	
6	First aid in case of traumatic injury	2	
	TOTAL (total - AH) 12	12	

6.2.2. The thematic plan of laboratory practicums (*if this type of classes is stipulated in the curriculum*)

№	Name of laboratory practicums	Volume in AH	
		semester	semester
	TOTAL (total - AH)		

6.2.3. Thematic plan of practicals

№	Name of the topics of practicals	Volume in AH	
		semester 11	semester 12
1	Emergency care in cardiology	6	
2	Assistance in stopping blood circulation and breathing	6	
3	Acute respiratory disorders	6	
4	Emergency conditions in allergology	6	
5	Providing assistance for disorders of consciousness	6	
6	First aid in case of traumatic injury	6	
	TOTAL (total - AH)	36	

6.2.4. Thematic plan of seminars (*if this type of classes is stipulated in the curriculum*)

№	Name of seminar topics	Volume in AH	
		semester	semester

	TOTAL (total - AH)		

#### 6.2.5. Types and topics of student's individual work (SIW)

№	Types and topics of SIW	Volume in AH	
		semester	semester
1	Emergency care in cardiology	4	
2	Assistance in stopping blood circulation and breathing	4	
3	Acute respiratory disorders	4	
4	Emergency conditions in allergology	4	
5	Providing assistance for disorders of consciousness	4	
6	First aid in case of traumatic injury	4	
	TOTAL (total - AH)	24	

#### 7. Types of assessment formats for ongoing monitoring and mid-term assessment

№	Se mes ter No.	Types of control	Name of section of academic discipline	Competence codes	Assessment formats		
					types	number of test questions	number of test task options
1.		Current monitoring	Control of mastering the topic of Emergency care in cardiology	<i>UC-8, GPC-5</i>	1 - Ongoing testing. Oral individual survey. 2 - Ongoing testing. Control work. 3 - Ongoing testing. Oral individual survey	5	2
			Control of mastering the topic of Assistance in stopping blood circulation and breathing	<i>UC-8, GPC-5</i>	1 - Ongoing testing. Oral individual survey. 2 - Ongoing testing. Control work.	5	2



						3 - Ongoing testing. Oral individual survey		
			Control of mastering the topic	Acute respiratory disorders	<i>UC-8, GPC-5</i>	1 - Ongoing testing. Oral individual survey. 2 - Ongoing testing. Control work. 3 - Ongoing testing. Oral individual survey	5	2
			Control of mastering the topic	Emergency conditions in allergology	<i>UC-8, GPC-5</i>	1 - Ongoing testing. Oral individual survey. 2 - Ongoing testing. Control work. 3 - Ongoing testing. Oral individual survey	5	2
			Control of mastering the topic	Providing assistance for disorders of consciousness	<i>UC-8, GPC-5</i>	1 - Ongoing testing. Oral individual survey. 2 - Ongoing testing. Control work. 3 - Ongoing testing.	5	2

						Oral individual survey		
			Control of mastering the topic	First aid in case of traumatic injury	<i>UC-8, GPC-5</i>	1 - Ongoing testing. Oral individual survey. 2 - Ongoing testing. Control work. 3 - Ongoing testing. Oral individual survey	5	2
2.		Mid-term assessment	Exam/ <b>Credit</b>					

## 8. Educational, methodological and informational support for mastering the academic discipline (printed, electronic publications, the Internet and other network resources)

### 8.1. Key literature references

№	Name according to bibliographic requirements	Number of copies	
		at the department	in the library
1	Экстренные и неотложные состояния. С.А.Сумин, К.Г.Шаповалов. Учебное пособие для кадров высшей квалификации. М, МИА, 2019	1	
2	V. Pichugin. Anesthesiology and Intensive Care Medicine. Handbook for foreign students. Nizhny Novgorod: Publishing House of Privolzhsky Research Medical University.- 2018.- 271 p.	1	
3	«Анестезиология и реаниматология» Под ред. Сумин С.А., М., Медицинское информационное агенство, 2019	1	

### 8.2. Further reading

№	Name according to bibliographic requirements	Number of copies	
		at the department	in the library
1	Национальное руководство по интенсивной терапии. Под ред. ИБ Заболотских. М., Медицинское информационное агенство 2019	1	
2	Национальное руководство по анестезиологии. Под ред. ИБ Заболотских. М., Медицинское информационное агенство 2019	1	

### 8.3. Electronic educational resources for teaching academic subjects

#### 8.3.1. Internal Electronic Library System of the University (IELSU)

<i>№</i>	<i>Name of the electronic resource</i>	<i>Brief description (content)</i>	<i>Access conditions</i>	<i>Number of users</i>
	Internal Electronic Library System (IELS)	Works of the academic staff of the Academy: textbooks and manuals, monographs, collections of scientific papers, scientific articles, dissertations, abstracts of dissertations, patents	from any computer located on the Internet, using an individual login and password [Electronic resource] – Access mode: <a href="http://95.79.46.206/login.php">http://95.79.46.206/login.php</a>	Not limited

#### 8.3.2. Electronic educational resources acquired by the University

<i>№</i>	<i>Name of the electronic resource</i>	<i>Brief description (content)</i>	<i>Access conditions</i>	<i>Number of users</i>
1	Electronic database "Student Consultant"	Educational literature + additional materials (audio, video, interactive materials, test tasks) for higher medical and pharmaceutical education. Publications are structured by specialties and disciplines in accordance with the current Federal State Educational Standards of Higher Education.	from any computer located on the Internet, using an individual login and password [Electronic resource] – Access mode: <a href="http://www.studmedlib.ru/">http://www.studmedlib.ru/</a>	General PRMU subscription
2	International scientometric database "Web of Science Core Collection"	Web of Science covers materials on natural, technical, social, and humanitarian sciences; takes into account the mutual citation of publications developed and provided by Thomson Reuters; has built-in capabilities for searching, analyzing, and managing bibliographic information.	Access is free from PIM computers [Electronic resource] – Access to the resource at: <a href="http://apps.webofknowledge.com">http://apps.webofknowledge.com</a>	General PRMU subscription
3	Domestic electronic periodicals	Periodicals on medical subjects and on higher school issues	- from the computers of the academy on the platform of the electronic library eLibrary.RU -journals of the Media Sphere publishing	Not limited

			house - from library computers or provided by by the library at the request of the user [Electronic resource] – Access mode: <a href="https://elibrary.ru/">https://elibrary.ru/</a>	
4	Electronic library system "Bukap"	Educational and scientific medical literature of Russian publishers, including translations of foreign publications.	from any computer located on the Internet by login and password, from the computers of the academy. The subscription editions are available for reading. [Electronic resource] – Access mode: <a href="http://www.books-up.ru">http://www.books-up.ru</a>	General PRMU subscription

### 8.3.3 Open access resources

№	Name of the electronic resource	Brief description (content)	Access conditions
1	Scientific Electronic Library eLIBRARY.RU	The largest Russian information portal in the field of science, technology, medicine and education, containing abstracts and full texts of scientific articles and publications. [Electronic resource] – Access mode: <a href="https://elibrary.ru/">https://elibrary.ru/</a>	from any computer located on the Internet.
2	Open Access Scientific Electronic Library CyberLeninka	Full texts of scientific articles with annotations published in scientific journals of Russia and neighboring countries. [Electronic resource] – Access mode: <a href="https://cyberleninka.ru/">https://cyberleninka.ru/</a>	from any computer located on the Internet

## 9. Material and technical support for mastering an academic discipline

### 9.1. List of premises for classroom activities for the discipline

1. Lecture hall equipped with multimedia equipment and microphone.
2. Offices for conducting clinical practical classes
3. Multidisciplinary accreditation and simulation Center
4. Intensive care and Intensive care units of MLPU – clinical bases of the Department of Anesthesiology, Resuscitation and Transfusiology

### 9.2. List of equipment for classroom activities for the discipline

1. Multimedia complex
2. Information stands on the therapeutic and protective regime in MLPU, nutrition and hygiene of

patients.

3. Medical documentation: medical history, outpatient card

4. Archival and educational case histories

5. Samples of the results of a general blood test.

6. Samples of urine test results.

7. Samples of the results of a biochemical blood test.

8. A set of electrocardiograms.

9. A set of radiographs for diseases of the lungs, heart and stomach.

10. Tonometers.

11. Phonendoscopes. Stethoscopes.

12. Tracking equipment (monitors).

13. Anesthesia and respiratory equipment

14. Equipment for infusion and transfusion therapy

15. Equipment for electro-pulse therapy

16. Extracorporeal detoxification equipment

17. Slides and multimedia presentations of lectures.

18. Simulators for practicing the skills of emergency care and CPR II-III and VI levels

### 9.3. A set of licensed and freely distributed software, including domestic production

Item no.	Software	number of licenses	Type of software	Manufacturer	Number in the unified register of Russian software	Contract No. and date
1	Wtware	100	Thin Client Operating System	Kovalev Andrey Alexandrovich	1960	2471/05-18 from 28.05.2018
2	MyOffice is Standard. A corporate user license for educational organizations, with no expiration date, with the right to receive updates for 1 year.	220	Office Application	LLC "NEW CLOUD TECHNOLOGIES"	283	without limitation, with the right to receive updates for 1 year.
3	LibreOffice		Office Application	The Document Foundation	Freely distributed software	
4	Windows 10 Education	700	Operating systems	Microsoft	Azure Dev Tools for Teaching Subscription	
5	Yandex. Browser		Browser	«Yandex»	3722	
6	Subscription to MS Office Pro for 170 PCs for FGBOU VO "PIMU" of the	170	Office Application	Microsoft		23618/HN10030 LLC "Softline Trade" from 04.12.2020

