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# EDUCATIONAL PROGRAM OF THE DISCIPLINE

Discipline:	Anesthesiology, resuscitation and intensive care		
Faculty	Medicine		
Name of	Hospital surgery, anesthesiology, resuscitation, urology,		
department:	traumatology, orthopedics		
Course 6			
Direction (speciality) 31.05.01 «General medicine»			
direction code (specialty), full name			

Form of study

full-time

full-time, part-time, part-time (indicate only those that are being implemented)

Date of introduction into the educational process of UISU: «1 » September 2019 г.

The program was updated at the meeting of the department: protocol  $N_{2}_{1}$  of 26.08.2020. The program was updated at the meeting of the department: protocol  $N_{2}_{1}$  of 25.08.2021. The program was updated at the meeting of the department: protocol  $N_{2}_{1}$  of 30.08.2022 The program was updated at the meeting of the department: protocol  $N_{2}$  10 of 10.05.2023 The program was updated at the meeting of the department: protocol  $N_{2}$  10 of 10.05.2023 The program was updated at the meeting of the department: protocol  $N_{2}$  10 of 16.05.2024

Information about autors:

Initials	Abbreviation of the	Degree, scientific rank
	department	
Zaitseva Olga Borisovna	Hospital surgery,	Associate Professor,
	anesthesiology,	Candidate of Medical
	resuscitation, urology,	Sciences, Associate Professor
	traumatology,	
	orthopedics	

AGREED	AGREED
Head of department, developing discipline	Head of the graduating Department
/Midlenko V.I./ signature «19» June 2019 yr.	M. Ofun_/Vise-Chripunova M.A. signature «19» June 2019 yr.



# 1. GOALS AND OBJECTIVES OF THE DISCIPLINE

# **1. GOALS OF THE DISCIPLINE:**

to study the basics of anesthesiology and intensive care with an analysis of the course of the most severe manifestations of various diseases that require resuscitation and intensive care; the study of new sections of the subject and more complex pathological processes.

# **OBJECTIVES OF THE DISCIPLINE:**

- a student's solid assimilation of all program issues;

- development of clinical thinking among students, improvement of differential diagnosis methods;

- training students to diagnose atypical forms of the disease, varieties of the course of diseases in each individual patient;

- mastery of the methods of intensive care, preoperative preparation and postoperative management of critically ill patients;

- students mastering laboratory and instrumental methods for diagnosing critical conditions;

- mastering the skills of performing basic and specialized resuscitation measures in the conditions of the Simulation Center for Medical Modeling.

# 2. PLACE OF THE DISCIPLINE IN THE STRUCTURE OF BPEP HE

Discipline B1.B.44 « Anesthesiology, reanimation and intensive care» refers to the basic part of the BPEP HE specialty 31.05.01 – «General medicine».

Mastering the discipline is based on knowledge, skills and abilities formed by previous disciplines and practices: Immunology, Propedeutics of internal diseases, General surgery, Pharmacology, Dentistry, Dermatovenereology, Neurology, medical genetics, neurosurgery, Otorhinolaryngology, Modern aspects of neurology, Urology and andrology, Pediatrics, Faculty Surgery, Obstetrics and Gynecology, Faculty Therapy, Ophthalmology, Occupational Diseases, Psychiatry, Medical Psychology, Endocrinology, Clinical Psychology, Clinical Pathological Anatomy, Hospital Therapy, Infectious Diseases, Outpatient Therapy, Hospital, Forensic Surgery, Pediatric Surgery miscarriage problems, Diabetology and emergency endocrinology, Clinical Practice (Medical Assistant of the Stationary); Practice for obtaining professional skills and professional experience (Physician assistant of an outpatient clinic).

The academic discipline "Anesthesiology, resuscitation and intensive care" is the preceding one for the disciplines: Topical issues of gynecology, Topical issues of hospital surgery, Phthisiology, Oncology, radiation therapy, Radiation diagnostics, Modern aspects of oncology, Topical issues of internal diseases, Diagnosis and treatment of extrapulmonary tuberculosis, Surgical gastroenterology and endoscopy, Palliative medicine, Actual issues of HIV infection, Clinical electrocardiography.

# 3. LIST OF PLANNED LEARNING OUTCOMES ON THE DISCIPLINE (MODULE), CORRELATED TO THE PLANNED OUTCOMES OF THE MAIN PROFESSIONAL EDUCATIONAL PROGRAM

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The process of studying the discipline is aimed at the formation of the following competencies:

Code and name of	List of planned learning outcomes by dissipling (module), convoluted with
Code and name of	List of planned learning outcomes by discipline (module), correlated with indiactors of achievement of competencies
competency GPC-8	indicators of achievement of competencies
Readiness for medi- cal	To know:
	clinical and pharmacological characteristics of the main groups of drugs and the rational chains of anapitic drugs in the treatment of major pathological
use of drugs and other	the rational choice of specific drugs in the treatment of major pathological
substances and their	syndromes of diseases and emergency conditions in patients
combinations in solving	To be able to:
professional problems	- analyze the effect of drugs on the totality of their pharmacological
	properties and the possibility of their use for the treatment of patients;
	- develop a treatment plan taking into account the course of the disease,
	select and prescribe drug therapy;
	- substantiate pharmacotherapy in a particular patient with major
	pathological syndromes and emergency conditions, determine the route of
	administration, mode and dose of drugs;
	- formulate indications for the chosen method of treatment taking into
	account etiotropic and pathogenetic agents, substantiate pharmacotherapy
	for a particular patient with major pathological syndromes and emergency
	conditions, determine the route of administration, regimen and dose of
	drugs, evaluate the effectiveness and safety of the treatment
	To possess:
	- basic medical diagnostic and treatment measures for first aid in emergency
	and life-threatening conditions
PC-6	To know:
The ability to determine	- the concepts of etiology, pathogenesis, morphogenesis of the disease, the
the patient's main	principles of classification of diseases;
pathological conditions,	- basic concepts of general nosology;
symptoms, disease	-clinical picture, course features and possible complications of the most
syndromes, nosological	common diseases that occur in a typical form;
forms in accordance	- features of medical care in emergency conditions
with the International	To be able to:
Statistical Classification	-interpret the results of the examination, put the patient a preliminary
of Diseases and Health	diagnosis, outline the amount of additional research to clarify the diagnosis;
Problems, X revision	- formulate a clinical diagnosis;
	- substantiate the nature of the pathological process and its clinical
	manifestations, the principles of pathogenetic therapy of emergency conditions
	To possess:
	- an algorithm for making a preliminary diagnosis to patients and, if necessary,
	with their subsequent referral to an additional examination;
	-algorithm for setting a detailed clinical diagnosis for patients;
	- interpretation of the results of laboratory, instrumental diagnostic methods in
	patients of different ages
PC-8	To know:
Ability to determine	- management tactics for patients with various diseases
management tactics for	To be able to:
patients with various	- determine the volume and venue of the necessary therapeutic measures in
nosological forms	patients
	- choose an individual type of care for the treatment of the patient in
	accordance with the situation: primary care, ambulance
	emergency help
	- develop a therapeutic action plan, taking into account the course of the
	disease and its treatment
	- formulate indications for the chosen method of treatment taking into account
	etiotropic and pathogenetic agents, justify

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	pharmacotherapy in a particular patient with major pathological syndromes					
	and emergency conditions, determine					
	ute of administration, regimen and dose of drugs, evaluate					
	effectiveness and safety of treatment					
	To possess:					
	- the main medical diagnostic and treatment measures for the provision of first					
	aid in emergency and life-threatening conditions					
PC-11	To know:					
Willingness to participate	- methods of conducting emergency measures and indications for					
in emergency medical care	hospitalization of patients;					
for conditions requiring	- clinical manifestations of the main syndromes requiring urgent medical					
urgent medical attention	intervention;					
_	- principles and methods of providing the first medical and emergency					
	To be able to:					
	- identify life-threatening violations and provide first aid in emergency					
	conditions to victims of lesions in emergency situations					
	To possess:					
	- an algorithm for the implementation of basic medical diagnostic and					
	therapeutic measures for the provision of first aid in emergency and life-					
	threatening conditions					

# **4. TOTAL EMPLOYMENT OF THE DISCIPLINE**

4.1. The volume of the discipline in credit units (total) \_\_3 units \_\_\_\_\_ 4.2. Discipline volume by type of academic work (in hours):

	Number of hours (form of study full-time)			
Type of educational work	Total according	Incl. by semester		
	to plan	11	12	
Contact work of students with the				
teacher in accordance with the curriculum				
Auditory lessons:	72	72		
Lectures	18	18		
Seminars and workshops	54	54		
Independent work	36	36		
Form of current control of	testing, abstract	testing, abstract		
knowledge and control of				
independent work: testing,				
counter. work, colloquium,				
abstract, etc. (at least 2 types)				
Types of intermediate certification	offset			
(exam, test)				
Total hours by discipline	108			

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# 4.3. Discipline content (module.) Distribution of hours by topics and types of educational work: Form of education\_\_\_full-time\_\_\_\_

Name	Total	Types of t	raining sessio	ns			Monito
sections and topics	Ioun				Classes		ring
		Lectures	Practical lessons, seminars	Lab. works, worksho ps	in an interacti ve form	Indepen dent work	form
1	2	3	4	5	6	7	
	S	ection 1. An	esthesiology.				
1. General questions of anesthesiology.	12	2	6			4	Testing abstract
	Section 2.	Resuscitatio	on and intensi	ve care.			
2. Complex methods of resuscitation and intensive care in case of clinical death and terminal conditions.	12	2	2		4	4	Тестиро- вание, решение клини- ческих задач
3. Resuscitation and intensive care of acute respiratory failure.	12	2	6			4	Testing abstract
4. Emergencies in diseases of the cardiovascular system.	12	2	6			4	Testing abstract
5. Resuscitation and intensive care for acute impairment of consciousness. Intensive care in neurology.	12	2	6			4	Testing abstract
6. Emergencies in endocrine diseases.	12	2	6			4	Testing abstract
7. Resuscitation and intensive care for shock conditions. Hemorrhagic, traumatic shock. Emergency care for thermal injuries and chemical burns.	12	2	2		4	4	Testing , solving clinical proble ms
8. Resuscitation and intensive therapy of anaphylactic shock, sepsis, septic shock. Syndrome of disseminated intravascular coagulation.	12	2	2		4	4	Testing , solving clinical proble ms
9. Resuscitation and intensive care for acute hepatic and renal failure. Extracorporeal detoxification methods.	12	2	6			4	Testing abstract
Total	108	18	42		12	36	

# 5. CONTENT OF THE DISCIPLINE (MODULE)

#### Section 1. Anesthesiology.

#### **Topic 1. General questions of anesthesiology.**

The history of development and organization of anesthetic and resuscitation care in the Russian Federation. Pain theory, modern concept of pain. Etiology, pathogenesis and pathways of pain. Classification of pain syndromes. Pain management principles. Medicines used for pain relief. Theories of anesthesia. Clinic and stages of general anesthesia. General anesthesia components. Anesthetic and respiratory equipment. Inhalation anesthesia. Non-inhalation general anesthesia. Combined general anesthesia. The main stages of general anesthesia. Local anesthetic techniques. Regional methods of anesthesia. Combined anesthesia. Stages of preparing a patient for anesthetic management.

#### Section 2. Resuscitation and intensive care.

# Topic 2. Complex methods of resuscitation and intensive care in case of clinical death and terminal conditions.

Pathophysiology of terminal conditions. Definition of the concepts of "clinical" and "biological" death, "terminal state". Flow phases and pathophysiological mechanisms of thanatogenesis. Clinical characteristics of biological and clinical death. Basic cardiopulmonary resuscitation. Indications and contraindications for resuscitation. Ensuring airway patency. External heart massage. Artificial respiration. Automatic external defibrillation. Extended (qualified) cardiopulmonary resuscitation. Electrical defibrillation. Cardioversion. Precardiac beat. Restoration and maintenance of airway patency. Extended CPR medications. Features of CPR in children. Prognosis after CPR. Postresuscitation disease. Regulatory documents governing the procedure for conducting resuscitation benefits.

#### **Topic 3. Resuscitation and intensive therapy of acute respiratory failure.**

Etiology, pathogenesis of classification and emergency care in acute respiratory failure. Laryngospasm. Asthmatic condition: acute bronchospasm, status asthmaticus, cardiac asthma. Foreign bodies of the upper respiratory tract. Drowning. Pneumothorax. Lung atelectasis. Massive exudative pleurisy. Pneumonia. Aspiration syndrome. Strangulation asphyxia. Acute respiratory distress syndrome.

#### Topic 4. Emergency conditions in diseases of the cardiovascular system.

Sudden cardiac death. Acute coronary syndrome. Myocardial infarction. Restoration of coronary perfusion. Drug therapy for acute coronary syndrome and acute myocardial infarction. Principles of therapy for acute right ventricular myocardial infarction. Complications of acute myocardial infarction: acute heart failure (left ventricular, right ventricular); cardiogenic shock, myocardial rupture, heart rhythm and conduction disturbances. Complicated hypertensive crisis. Pulmonary embolism. Emergencies in diseases of the aorta. Cardiac tamponade.

# Topic 5. Resuscitation and intensive care in acute impairment of consciousness. Intensive care in neurology.

Quantitative and qualitative syndromes of impaired consciousness. Assessment of the level of consciousness. Systematization of types of loss of consciousness. Emergency care for loss of consciousness. Sudden and short-term loss of consciousness. Sudden and prolonged loss of consciousness. Acute violation of cerebral circulation. Epidemiology, definition, types. Regulatory documents for the organization of medical care. Transient cerebrovascular accidents: transient ischemic attack, cerebral hypertensive crisis. Cerebral stroke: ischemic stroke, hemorrhagic stroke.

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Principles of Intensive Care. Cerebral edema. Hyperthermic syndrome. Convulsive syndrome.

#### Topic 6 . Emergencies in endocrine diseases .

Diabetes. Acute complications of diabetes mellitus: hypoglycemia and hypoglycemic coma, diabetic ketoacidosis and ketoacidotic coma, hyperosmolar hyperglycemic state, lactic acidosis (lactic acidosis). Acute adrenal insufficiency.

# Topic 7 . Resuscitation and intensive care for shock conditions. Hemorrhagic, traumatic shock. Emergency care for thermal injuries and chemical burns.

Classification of shock states. Pathophysiological mechanisms of the development of shock bleeding. Gastrointestinal conditions. Classification bleeding. Acute of gastric injury syndrome. Etiology and pathogenesis of the development of hemorrhagic shock. Clinical and laboratory manifestations of the severity of hemorrhagic shock. Intensive in naya treatment of infusion rules -transfuzionno second therapy. Complications hemorrhagic shock. of fluid therapy. Providing emergency medical care in case of an accident. Features of providing emergency medical care for damage to various anatomical areas. Principles of traumatic shock treatment. Thermal burns. Determination of the degree and area of thermal skin damage. Burn disease. Burn inhalation injury. Electrical trauma. Chemical burns. Sunstroke shock. Thermal and heatstroke. Frostbite. General cooling of the body.

# Topic 8 . Resuscitation and intensive therapy of anaphylactic shock , sepsis , septic shock . Disseminated intravascular coagulation syndrome.

Etiology and pathogenesis of the development of anaphylactic and anaphylactoid reactions. Clinical manifestations of anaphylactic reaction. Intensive therapy for anaphylactic shock . Rules for hospitalization of patients with anaphylactic shock .Sepsis. Definition , terminology, etiology and pathogenesis. Clinical and laboratory characteristics of the stages of the septic process . The main directions of intensive ter and FDI . Disseminated intravascular coagulation syndrome. Physiology and laboratory diagnostics of the state of the hemostasis system. Etiology and pathogenesis of disseminated intravascular coagulation. Clinical laboratory diagnostics and intensive therapy of DIC syndrome.

# Topic 9 . Resuscitation and intensive care for acute hepatic and renal failure. Extracorporeal detoxification methods.

E tiologiya and pathogenesis of acute liver failure. Clinical and laboratory characteristics of the stages acute liver failure. Intensive therapy of acute printed e Night of failure. About p th renal th insufficiency s. Perenal, renal, postrenal forms of ARF. Principles of prevention and treatment of acute renal failure. Extracorporeal detoxification methods . Indications and contraindications for use .

# 6. TOPICS practical and seminars .

#### Section 1 . Anesthesiology.

- Topic 1 . General questions of anesthesiology (seminar) Questions:
- 1. Theories of pain, the modern concept of pain.
- 2. Classification of pain syndromes.
- 3 . Pain management principles.
- 4. Medicines used for pain relief.
- 5. Clinic and stages of general anesthesia.
- 6. General anesthesia components.

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- 7 . Inhalation anesthesia.
- 8. The main stages of general anesthesia.
- 9. Regional methods of anesthesia.
- 10. Combined anesthesia.
- 11. Stages of preparing a patient for anesthetic management.

# Section 2. Resuscitation and intensive care.

# Topic 2 . Complex methods of intensive therapy in Klinichev e tion death and terminal states (practical simulation session)

# **Questions:**

- 1 . Basic cardiopulmonary resuscitation.
- 2. Indications and contraindications for resuscitation and onny activities.
- 3. Ensuring airway patency.
- 4. External heart massage.
- 5 . Artificial respiration.
- 6. Automatic external defibrillation.
- 7. Expanded (qualified) cardiopulmonary resuscitation.
- 8 . Electrical defibrillation.
- 9. Restoration and maintenance of airway patency.
- 10 . Extended CPR medications.
- 11 . Regulatory documents governing the procedure for conducting resuscitation benefits.

# **Topic 3** . **Resuscitation and intensive care of acute respiratory Insufficient h Nost (seminar)** . **Questions:**

- 1. Etiology, pathogenesis of classification and emergency care in acute respiratory failure.
- 2. Asthmatic condition: acute bronchospasm, status asthmaticus, cardiac asthma.
- 3 . Foreign bodies of the upper respiratory tract.
- 4 . Pneumothorax.
- 5 . Pneumonia.
- 6. Aspiration syndrome.
- 7. Acute respiratory distress syndrome.

# Topic 4 . Emergencies in diseases of the cardiovascular system (seminar) .

#### **Questions:**

- 1. Myocardial infarction.
- 2 . Restoration of coronary perfusion.
- 3. Drug therapy for acute coronary syndrome and acute myocardial infarction.
- 4. Complications of acute myocardial infarction: acute heart failure (left ventricular, right ventricular); cardiogenic shock, myocardial rupture, heart rhythm and conduction disturbances.
- 5 . Pulmonary embolism.
- 6 . Cardiac tamponade.

# Topic 5 . Resuscitation and intensive care for acute impairment of consciousness. Intensive care in neurology (seminar) .

# Questions:

- 1. Assessment of the level of consciousness.
- 2. Systematization of types of loss of consciousness.
- 3. Emergency care for loss of consciousness.
- 4 . Acute violation of cerebral circulation.
- 5. Epidemiology, definition, types.
- 6. Regulatory documents for the organization of medical care.

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- 7 . Cerebral stroke: ischemic stroke, hemorrhagic stroke.
- 8. Principles of Intensive Care for Stroke.
- 9. Cerebral edema.

# Topic 6 . Emergencies in endocrine diseases (seminar) . Questions:

- 1 . Mr. ipogl Ikem and hypoglycemic coma.
- 2 . D iabetichesky keto acidosis and coma ketoatsidoticheskaya.
- 3. Mr. iperosmolyarn th hyperglycemic condition.

# Topic 7 . Resuscitation and intensive care for shock conditions. Hemorrhagic, traumatic shock. Emergency care for thermal injuries and chemical burns (seminar, business game) . Questions:

- 1. Classification of shock states.
- 2. Pathophysiological mechanisms of development of shock conditions.
- 3. Etiology and pathogenesis of the development of hemorrhagic shock.
- 4. Intense in na i therapy of hemorrhagic shock.
- 5. P ravilin infusion-transfusion therapy.
- 6. Providing emergency medical care in case of an accident.
- 7. Features of the provision of emergency medical care in case of damage to various anatomical areas.
- 8 . Principles of traumatic shock treatment.
- 9. Electrical trauma.
- 1 0. Chemical burns.

# Topic 8 . Resuscitation and intensive therapy of anaphylactic shock , sepsis , septic shock . Disseminated intravascular coagulation syndrome (practical exercise, business game) . Questions :

- 1. Etiology and pathogenesis of the development of anaphylactic and anaphylactoid reactions.
- 2. Clinical manifestations of anaphylactic reaction .
- 3. Intensive therapy for anaphylactic shock .
- 4. Rules for hospitalization of patients with anaphylactic shock .
- 5. Sepsis. Definition, terminology, etiology and pathogenesis.
- 6. The main directions of intensive ter and FDI.
- 7. Disseminated intravascular coagulation syndrome.
- 8 . Clinical laboratory diagnostics and intensive therapy of DIC syndrome.

# Topic 9 . Resuscitation and intensive care for acute hepatic and renal failure. Extracorporeal detoxification methods (practical lesson) .

# **Questions:**

- 1. Etiology and pathogenesis of acute liver failure.
- 2. Intensive therapy of acute printed e Night failure.
- 3. About p th renal th insufficiency s.
- 4. Perenal, renal, postrenal forms of ARF.
- 5 . Principles of prevention and treatment of acute renal failure.

# 7. LABORATORY WORKS (LABORATORY PRACTICE)

This type of work is not provided for by the UP.

# 8. TOPICS OF COURSE, CONTROL WORKS, ABSTRACTS

#### The purpose and objectives of the study:

The goal - information and controls for effective mastering educational mat e Rial.

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*Objectives: To* study the etiology, pathogenesis and treatment of disease clinical entities with an and Lees medical errors to the given theoretical material.

Requirements for their content, scope of design:

1. Clarity and consistency of presentation of the material .

2. Availability of a list of used literature and Internet resources .

3. Design: 10-15 pages of printed text, A4 format, Times New Roman font, font size - 14, line spacing - one and a half.

# **Abstracts subject:**

1. The history of development and organization of anesthetic and resuscitation care in the Russian Federation.

- 2. Pain theory, modern concept of pain.
- 3. Anesthetic and respiratory equipment.
- 4. Inhalation and non-inhalation anesthesia.
- 5. Flow phases and pathophysiological mechanisms of thanatogenesis.
- 6. Postresuscitation disease.
- 7. Asthmatic condition: acute bronchospasm, status asthmaticus.
- 8. Drowning.
- 9. Aspiration syndrome.
- 10. Strangulation asphyxia.
- 11. Acute respiratory distress syndrome.
- 12. Complicated hypertensive crisis.
- 13. Pulmonary embolism.
- 14. Emergencies in diseases of the aorta.
- 15. Cardiac tamponade.
- 16. Cerebral edema.
- 17. Hyperthermic syndrome.
- 18. Convulsive syndrome.
- 19. Lactic acidosis (lactic acidosis).
- 20. Acute adrenal insufficiency.
- 21. Thermal inhalation injury.
- 22. Electrical trauma.
- 23. Chemical burns.
- 24. Sunstroke and heatstroke.
- 25. Frostbite.
- 26. General cooling of the body.
- 27. Disseminated intravascular coagulation syndrome.
- 28. Extracorporeal detoxification methods .

# 9. LIST OF QUESTIONS TO OFFSET Y

- 1. Pain theory, modern concept of pain. Etiology, pathogenesis and pathways of pain.
- 2. Pain management principles. Medicines used for pain relief.

3. Clinic and stages of general anesthesia. General anesthesia components. The main stages of general anesthesia.

- 4. Local anesthetic techniques. Regional methods of anesthesia.
- 5. Stages of preparing a patient for anesthetic management.
- 6. Pathophysiology of terminal conditions. Flow phases and pathophysiological mechanisms of thanatogenesis. Clinical characteristics of biological and Klinichev e tion of death.
- 7. Indications and contraindications for resuscitation and onny activities.
- 8. Methods of bespechenii I airway.
- 9. Technique n aruzhn th massage and heart. Reasons for inefficiency. Complications

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10. Rules of application and vtomatichesk th naruzhn th defibrillator torus .

11. Rules for making e The electrical second defibrillation and . Safety engineering.

12. Methods in Restoring I and maintain I airway at the stage of extended CPR .

13. Extended CPR medications.

14. Features of CPR in children.

15. Postresuscitation disease. Pathogenesis, criteria of organ failure. Principles of Intensive Care.

16. Asthmatic condition: acute bronchospasm, status asthmaticus. Pathogenesis, clinic, intensive care.

17. Providing airway when hit and homogeneity th body in Outer e of respiratory e paths and .

18. Drowning. Pathogenesis, clinic, intensive care.

19. Pneumothorax. Pathogenesis, types. Intensive therapy.

20. Principles of intensive therapy in the development and spiratsionn th syndrome as well .

21. Acute respiratory distress syndrome. Pathogenesis, clinic, intensive care.

22. Acute coronary syndrome. Myocardial infarction. Restoration of coronary perfusion.

23. Complications of acute myocardial infarction: acute heart failure (left ventricular, right ventricular); cardiogenic shock, myocardial rupture, heart rhythm and conduction disturbances.

24. Complicated hypertensive crisis. Principles of Intensive Care.

25. Pulmonary embolism. Pathogenesis, clinic, intensive care

26. Cardiac tamponade. Pathogenesis, clinic, intensive care

27. Quantitative and qualitative syndromes of impaired consciousness. Assessment of the level of consciousness.

28. Emergency care for loss of consciousness.

29. Acute violation of cerebral circulation. Cerebral stroke. Principles of Intensive Care for Stroke.

30. Cerebral edema. Hyperthermic syndrome. Convulsive syndrome. Clinic, intensive care.

31. Hypoglycemia and hypoglycemic coma. Pathogenesis, clinic, intensive care

32. Diabetic ketoacidosis and ketoacidotic coma. Pathogenesis, clinic, intensive care

33. Hyperosmolar hyperglycemic state. Pathogenesis, clinic, intensive care

34. Lactic acidosis (lactic acidosis). Pathogenesis, clinic, intensive care

35. Acute adrenal insufficiency. Pathogenesis, clinic, intensive care

36. Classification of shock states. Pathophysiological mechanisms of the development of shock conditions.

37. Classification of bleeding. Gastrointestinal bleeding. Acute gastric injury syndrome. Pathogenesis, clinic, intensive care

38. Mr. emorragichesk s shock. Intensive in naya hemorrhagic shock therapy. Rules for infusion-transfusion therapy. Complications of fluid therapy.

39. Providing emergency medical care in case of an accident. Features of providing emergency medical care for damage to various anatomical areas. Principles of traumatic shock treatment.

40. Thermal burns. Determination of the degree and area of thermal skin damage. Burn disease. Burn shock. Pathogenesis, clinic, intensive care

41. Anaphylaxis and anaphylactic shock. Pathogenesis, clinic, intensive care

42. Sepsis and septic shock . Pathogenesis, clinic, intensive care

43. Disseminated intravascular coagulation syndrome. Pathogenesis, clinic, intensive care

44. Clinical and laboratory characteristics of the stages of acute liver failure. Intensive therapy of acute printed e Night failure.

45. Perenal, renal, postrenal forms of ARF. Principles of prevention and treatment of acute renal failure.

46. Extracorporeal detoxification methods . Indications and contraindications for use .

# **10. INDEPENDENT WORK OF STUDENTS**

Form of st	udy	full-time	
	5		

Title of sections and topics	Type of independent work (study of	Volume in	form of control
	educational material, problem solving, essay,	hours	( checking the

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	report, test work, preparation for passing the test, exam, etc.)		solution of problems, abstract, etc.)
	Section 1. Anesthesiology.		-
1 . General questions of anesthesiology .	study of educational material, essay , preparation for passing the test	4	Check-tion solution of clinical tasks, p eferat and
	Section 2. Resuscitation and intensive care	•	
2 . Complex methods of resuscitation and intensive - term therapy during clinical death and terminal condition I niyah.	study of educational material, essay, preparation for passing the test	4	Checking the solution of clinical problems, abstract
3 . Reanimation and intensive therapy of acute respiratory failure of STI.	study of educational material, essay, preparation for passing the test	4	Checking the solution of clinical problems, abstract
4 . Emergency conditions for diseases of the cardiovascular system.	study of educational material, essay, preparation for passing the test	4	Checking the solution of clinical problems, abstract
5. Resuscitation and intensive therapy for acute impairment of consciousness. Intensive care in neurology.	study of educational material, essay, preparation for passing the test	4	Checking the solution of clinical problems, abstract
6. Emergencies in endocrine diseases.	study of educational material, essay, preparation for passing the test	4	Checking the solution of clinical problems, abstract
7. Resuscitation and intensive therapy for shock conditions. Hemorrhagic, traumatic shock. Emergency care for thermal injuries and chemical burns.	study of educational material, essay, preparation for passing the test	4	Checking the solution of clinical problems, abstract
8 . Resuscitation and intensive therapy of anaphylactic shock, sepsis, septic shock. Dissemi syndrome - nirovannogo intravascular coagulation.	study of educational material, essay, preparation for passing the test	4	Checking the solution of clinical problems, abstract
9 . Resuscitation and intensive care for acute hepatic and renal failure. Extracorporeal techniques detoxicating and tion.	study of educational material, essay, preparation for passing the test	4	Checking the solution of clinical problems, abstract

# 11 . EDUCATIONAL-METHODOLOGICAL AND INFORMATION PROVIDING DISCIPLINE

# a) List of recommended literature:

# of ain I :

1. Anesthesiology: national leadership [Electronic resource]. - M.: GEOTAR-Media, 2017.656 p. ISBN 978-5-9704-3953-1 URL: http://www.studentlibrary.ru/book/ISBN9785970439531.html

2. Intensive therapy [Electronic resource]. - M.: GEOTAR-Media, 2017.928 p . ISBN 978-5-9704-4161-9 URL: http://www.studentlibrary.ru/book/ISBN9785970441619.html

# additional :

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1. Anesthesiology, resuscitation and intensive therapy in children / Stepanenko S.M. [Electronic resource] / Stepanenko S.M. [and etc.]. - M.: GEOTAR-Media, 2016.240 p. ISBN 978-5-9704-3937-1 URL: http://www.studentlibrary.ru/book/ISBN9785970439371.html

Infusion-transfusion therapy [Electronic resource]. - M.: GEOTAR-Media, 2017.256 p. ISBN 978-5-9704-4020-9 2. URL: http://www.studentlibrary.ru/book/ISBN9785970440209.html

3. Kolesnikova, M.A. Anesthesiology and resuscitation: textbook / M.A. Kolesnikova. - 2nd ed. - Saratov: Scientific book, 2019 .-- 159 p. - ISBN 978-5-9758-1883-6. - Text: electronic // Electronic library system IPR BOOKS: [site]. -URL: http://www.iprbookshop.ru/80999.html (date of access: 01.11.2019). - Access mode: for authorization. users

# educational - methodical

1. Prevention and treatment of the syndrome of acute gastric injury [Electronic resource]: electron. study. course: study guide for honey. universities / V.I. Midlenko [and others]. -Electron. text data. - Ulyanovsk: UlSU, 2016. - (Electronic training course). - CD - ROM / 2. Diseases of the operated stomach [Electronic resource]: study guide / V.I. Midlenko [et al.]; UISU,

IMEiFK. - Electronic text data. (1 file: 1.10 MB). - Ulyanovsk: Ulgu, 2017.

**AGREED:** 1.1. Subelleomerape Oon Linegeneriu robo 1 May Position of scientific library employee full name signature date

# **b)** Software

1. Electronic library systems:

1.1. IPRbooks [Electronic resource]: electronic library system / group of companies IPR Media. -Electron. Dan. - Saratov, [2019]. - Access mode: http://www.iprbookshop.ru.

1.2. YURAYT [Electronic resource]: electronic library system / LLC Electronic publishing house YURAYT. - Electron. Dan. - Moscow, [2019]. - Access mode: https://www.biblio-online.ru.

1.3. Student consultant [Electronic resource]: electronic library system / Polytekhresurs LLC. -Electron. Dan. - Moscow, [2019]. - Access mode: http://www.studentlibrary.ru/pages/catalogue.html.

1.4. Lan [Electronic resource]: electronic library system / EBS Lan. - Electron. Dan. - St. Petersburg, [2019]. - Access mode: https://e.lanbook.com.

1.5. Znanium.com [Electronic resource]: electronic library system / Znanium LLC. - Electron. Dan. -Moscow, [2019]. - Access mode: http://znanium.com.

2. ConsultantPlus [Electronic resource]: reference legal system. / Company "Consultant Plus" -Electron. Dan. - Moscow: ConsultantPlus, [2019].

3. Database of periodicals [Electronic resource]: electronic journals / LLC IVIS. - Electron. Dan. -Moscow, [2019]. - Access mode: https://dlib.eastview.com/browse/udb/12.

4. National Electronic Library [Electronic resource]: electronic library. - Electron. Dan. - Moscow, [2019]. - Access mode: https://neb.rf.

5. Electronic library of dissertations of the RSL [Electronic resource]: electronic library / FGBU RSL.

- Electron. Dan. - Moscow, [2019]. - Access mode: https://dvs.rsl.ru.

6. Federal information and educational portals:

6.1. Information system Single window of access to educational resources. Access mode: http://window.edu.ru

6.2. Federal portal Russian education. Access mode: http://www.edu.ru

7. Educational resources of UISU:

7.1. Electronic library of UISU. Access mode: http://lib.ulsu.ru/MegaPro/Web

Ministry of Science and Higher Education of the Russian Federation Ulyanovsk State University	Форма	
f- Educational program of the discipline		

7.2. UISU educational portal. Access mode: http://edu.ulsu.ru5.2. UISU educational portal.

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# **12. MATERIAL AND TECHNICAL SUPPORT OF THE DISCIPLINE:**

Auditoriums for lectures, seminars and practical classes, for monitoring and midterm certification, group and individual consultations.

The classrooms are equipped with specialized furniture. The lecture rooms are equipped with multimedia equipment to provide information to a large audience. Premises for independent work are equipped with computer equipment with the ability to connect to the Internet and provide access to the electronic information and educational environment, the electronic library system. The list of equipment used in the educational process is indicated in accordance with the information on the material and technical support and equipment of the educational process posted on the official website of UISU in the section "Information about the educational organization".

Simulation Center for Medical Modeling IMEiFK UIGU. Creation of clinical situations that are as close as possible to real ones, but safe for patients, development and maintenance of skills for professional action in emergency situations, which are necessary for every medical specialist, development of interaction in teamwork and the determining role of a leader in it.

The clinical base (GUZ "Ulyanovsk Regional Clinical Center for Specialized Types of Medical Care") is equipped with the necessary tools and equipment for the implementation of qualified and specialized anesthetic and resuscitation care, incl. using anesthesia and respiratory equipment, ultrasound, endoscopic equipment, computer equipment and magnetic resonance imaging, endovascular apparatus for performing maloinvazi equipment in GOVERNMENTAL interventions.

# **13. SPECIAL CONDITIONS FOR STUDENTS WITH DISABILITIES**

If necessary, students from among persons with disabilities (at the request of the student) can be offered one of the following options for the perception of information, taking into account their individual psychophysical characteristics:

- for persons with visual impairments: in printed form in an enlarged font; in the form of an electronic document; in the form of an audio file (translation of educational materials into – audio format); in printed form in Braille; individual consultations with the involvement of a tiflosurd interpreter; individual assignments and consultations;

- for persons with hearing impairments: in printed form; in the form of an electronic document; videos with subtitles; individual consultations with the involvement of a sign language interpreter; individual assignments and consultations;

- for persons with disabilities of the musculoskeletal system: in printed form; in the form of an electronic document; in the form of an audio file; individual assignments and consultations. -

Developer \_\_\_\_\_\_\_ associate professor Zaitseva O.B.

ignature position full name

Ministry of Science and Higher Education of the Russian Federation Ulyanovsk State University	Форма	
f- Educational program of the discipline		U

# LIST OF CHANGES

to the work program« Anesthesiology, esuscitation and intensive care» specialty 31.05.01 «General Medicine»

Nº ite m nu mb er	Content of the change or a link to the attached text of the change	full name of the head of the Department implementing the discipline	Signature	Date
1	Introduction of changes to item C) Professional databases, information and reference systems item 11 "Educational,methodological and information support of the discipline" with the design of Appendix 1	Midlenko V. I.	D	26.08.20
2	Introduction of changes to item A) Recommended Literature item 11 "Educational,methodological and information support of the discipline" with the design of Appendix 2	Midlenko V. I.	D	26.08.20

Ministry of Science and Higher Education of the Russian Federation Ulyanovsk State University	Форма	
f- Educational program of the discipline		Y

# Appendix 1

"Amendments to item a) The list of recommended literature item 11 "Educational, methodological and informational support of discipline /practice" with the design of a separate appendix

# a) List of recommended literature:

#### of ain I :

3. Anesthesiology: national leadership [Electronic resource]. - M.: GEOTAR-Media, 2017.656 p. ISBN 978-5-9704-3953-1 URL: http://www.studentlibrary.ru/book/ISBN9785970439531.html

4. Intensive therapy [Electronic resource]. - M.: GEOTAR-Media, 2017.928 p. ISBN 978-5-9704-4161-9 URL: http://www.studentlibrary.ru/book/ISBN9785970441619.html

#### additional :

4. Anesthesiology, resuscitation and intensive therapy in children / Stepanenko S.M. [Electronic resource] / Stepanenko S.M. [and etc.]. - M.: GEOTAR-Media, 2016.240 p. ISBN 978-5-9704-3937-1 URL: http://www.studentlibrary.ru/book/ISBN9785970439371.html

5. Infusion-transfusion therapy [Electronic resource]. - M.: GEOTAR-Media, 2017.256 p. ISBN 978-5-9704-4020-9 URL: http://www.studentlibrary.ru/book/ISBN9785970440209.html

6. Kolesnikova, M.A. Anesthesiology and resuscitation: textbook / M.A. Kolesnikova. - 2nd ed. - Saratov: Scientific book, 2019 --- 159 p. - ISBN 978-5-9758-1883-6. - Text: electronic // Electronic library system IPR BOOKS: [site]. - URL: http://www.iprbookshop.ru/80999.html (date of access: 01.11.2019). - Access mode: for authorization. users

# educational - methodical

1. Prevention and treatment of the syndrome of acute gastric injury [Electronic resource]: electron. study. course: study guide for honey. universities / V.I. Midlenko [and others]. - Electron. text data. - Ulyanovsk: UlSU, 2016. - (Electronic training course). - CD - ROM /

2. Diseases of the operated stomach [Electronic resource]: study guide / V.I. Midlenko [et al.]; UlSU, IMEiFK. - Electronic text data. (1 file: 1.10 MB).- Ulyanovsk: Ulgu, 2017.

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Ministry of Science and Higher Education of the Russian Federation Ulyanovsk State University	Форма	
f- Educational program of the discipline		U

# c) Professional databases, information and reference systems

c) Professional databases, information and reference systems

1. Electronic library systems:

1.1. IPRbooks: electronic library system: website / group of companies IPR Media. - Saratov, [2020].- URL: http://www.iprbookshop.ru. - Access mode: for registered. users. - Text: electronic.

1.2. YURAYT: electronic library system: website / LLC Electronic publishing house YURAYT. -

Moscow, [2020]. - URL: https://www.biblio-online.ru. - Access mode: for registered. users. - Text: electronic.

1.3. Student advisor: electronic library system: website / Polytekhresurs LLC. - Moscow, [2020]. - URL: http://www.studentlibrary.ru/catalogue/switch\_kit/x2019-128.html. - Access mode: for registered. users. - Text: electronic.

1.4. Lan: electronic library system: website / EBS Lan. - St. Petersburg, [2020]. - URL: http://www.studentlibrary.ru/pages/catalogue.html https://e.lanbook.com. - Access mode: for registered. users. - Text: electronic.

1.5. Znanium.com: electronic library system: website / Znanium LLC. - Moscow, [2020]. - URL: http://www.studentlibrary.ru/pages/catalogue.html http://znanium.com. - Access mode: for registered. users. - Text: electronic.

1.6. Clinical Collection: collection for medical universities, clinics, medical libraries // EBSCOhost: [portal]. - URL: http://web.a.ebscohost.com/ehost/search/advanced?vid=1&sid=e3ddfb99-a1a7-46dd-a6eb-2185f3e0876a%40sessionmgr4008. - Access mode: for authorization. users. - Text: electronic.

2. ConsultantPlus [Electronic resource]: reference legal system. / LLC "Consultant Plus" - Electron. Dan. - Moscow: ConsultantPlus, [2020].

3. Databases of periodicals:

3.1. Database of periodicals: electronic journals / LLC IVIS. - Moscow, [2020]. - URL: https://dlib.eastview.com/browse/udb/12. - Access mode: for authorization users. - Text: electronic.

3.2. eLIBRARY.RU: scientific electronic library: site / Scientific Electronic Library LLC. - Moscow, [2020]. - URL: http://elibrary.ru. - Access mode: for authorization users. - Text: electronic

3.3. "Grebennikon": electronic library / ID Grebennikov. - Moscow, [2020]. - URL: https://id2.actionmedia.ru/Personal/Products. - Access mode: for authorization users. - Text: electronic.

4. National Electronic Library: Electronic Library: Federal State Information System: website / Ministry of Culture of the Russian Federation; RSL. - Moscow, [2020]. - URL: http://www.studentlibrary.ru/pages/catalogue.html https://neb.rf. - Access mode: for users of the scientific library. - Text: electronic.

5. SMART Imagebase // EBSCOhost: [portal]. - URL: https://ebsco.smartimagebase.com/?TOKEN=EBSCO-

1a2ff8c55aa76d8229047223a7d6dc9c&custid=s6895741. - Access mode: for authorization users. - Image: electronic.

6. Federal information and educational portals:

6.1. Single window of access to educational resources: federal portal / founder of FGAOU DPO TsRGOP and IT. - URL: http://window.edu.ru/. - Text: electronic.

6.2. Russian education: federal portal / founder of FGAOU DPO TsRGOP and IT. - URL: http://www.edu.ru. - Text: electronic.

7. Educational resources of UlSU:

7.1. Electronic library of UlSU: module ABIS Mega-PRO / Data Express LLC. - URL: http://lib.ulsu.ru/MegaPro/Web. - Access mode: for users of the scientific library. - Text: electronic.

Ministry of Science and Higher Education of the Russian Federation Ulyanovsk State University	Форма	
f- Educational program of the discipline		U

7.2. UISU educational portal. - URL: http://edu.ulsu.ru. - Access mode: for register. users. -Text:electronic.

#### **AGREED:**

date Position of information technology Department employee full name signature 6)

Ministry of Science and Higher Education of the Russian Federation Ulyanovsk State University	Форма	
f- Educational program of the discipline		U

# LIST OF CHANGES to the work program« Anesthesiology, esuscitation and intensive care» specialty 31.05.01 «General Medicine»

Nº ite m nu mb er	Content of the change or a link to the attached text of the change	full name of the head of the Department implementing the discipline	Signature	Date
1	Introduction of changes to item C) Professional databases, information and reference systems item 11 "Educational,methodological and information support of the discipline" with the design of Appendix 1	Midlenko V. I.	D	25.08.21
2	Introduction of changes to item A) Recommended Literature item 11 "Educational,methodological and information support of the discipline" with the design of Appendix 2	Midlenko V. I.	D	25.08.21

Ministry of Science and Higher Education of the Russian Federation Ulyanovsk State University	Форма	
f- Educational program of the discipline		U

Appendix 1

"Amendments to item a) The list of recommended literature item 11 "Educational, methodological and informational support of discipline /practice" with the design of a separate appendix

# a) List of recommended literature:

## of ain I :

5. Anesthesiology: national leadership [Electronic resource]. - M.: GEOTAR-Media, 2017.656 p. ISBN 978-5-9704-3953-1 URL: http://www.studentlibrary.ru/book/ISBN9785970439531.html

6. Intensive therapy [Electronic resource]. - M.: GEOTAR-Media, 2017.928 p. ISBN 978-5-9704-4161-9 URL: http://www.studentlibrary.ru/book/ISBN9785970441619.html

#### additional :

7. Anesthesiology, resuscitation and intensive therapy in children / Stepanenko S.M. [Electronic resource] / Stepanenko S.M. [and etc.]. - M.: GEOTAR-Media, 2016.240 p. ISBN 978-5-9704-3937-1 URL: http://www.studentlibrary.ru/book/ISBN9785970439371.html

8. Infusion-transfusion therapy [Electronic resource]. - M.: GEOTAR-Media, 2017.256 p. ISBN 978-5-9704-4020-9 URL: http://www.studentlibrary.ru/book/ISBN9785970440209.html

9. Kolesnikova, M.A. Anesthesiology and resuscitation: textbook / M.A. Kolesnikova. - 2nd ed. - Saratov: Scientific book, 2019 --- 159 p. - ISBN 978-5-9758-1883-6. - Text: electronic // Electronic library system IPR BOOKS: [site]. - URL: http://www.iprbookshop.ru/80999.html (date of access: 01.11.2019). - Access mode: for authorization. users

# educational - methodical

1. Prevention and treatment of the syndrome of acute gastric injury [Electronic resource]: electron. study. course: study guide for honey. universities / V.I. Midlenko [and others]. - Electron. text data. - Ulyanovsk: UlSU, 2016. - (Electronic training course). - CD - ROM /

2. Diseases of the operated stomach [Electronic resource]: study guide / V.I. Midlenko [et al.]; UlSU, IMEiFK. - Electronic text data. (1 file: 1.10 MB). Ulyanovsk: Ulgu, 2017.

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Ministry of Science and Higher Education of the Russian Federation Ulyanovsk State University	Форма	
f- Educational program of the discipline		U

# c) Professional databases, information and reference systems

c) Professional databases, information and reference systems

1. Electronic library systems:

1.1. IPRbooks: electronic library system: website / group of companies IPR Media. - Saratov, [2021].- URL: http://www.iprbookshop.ru. - Access mode: for registered. users. - Text: electronic.

1.2. YURAYT: electronic library system: website / LLC Electronic publishing house YURAYT. -

Moscow, [2021]. - URL: https://www.biblio-online.ru. - Access mode: for registered. users. - Text: electronic.

1.3. Student advisor: electronic library system: website / Polytekhresurs LLC. - Moscow, [2021]. - URL: http://www.studentlibrary.ru/catalogue/switch\_kit/x2019-128.html. - Access mode: for registered. users. - Text: electronic.

1.4. Lan: electronic library system: website / EBS Lan. - St. Petersburg, [2021]. - URL: http://www.studentlibrary.ru/pages/catalogue.html https://e.lanbook.com. - Access mode: for registered. users. - Text: electronic.

1.5. Znanium.com: electronic library system: website / Znanium LLC. - Moscow, [2021]. - URL: http://www.studentlibrary.ru/pages/catalogue.html http://znanium.com. - Access mode: for registered. users. - Text: electronic.

1.6. Clinical Collection: collection for medical universities, clinics, medical libraries // EBSCOhost: [portal]. - URL: http://web.a.ebscohost.com/ehost/search/advanced?vid=1&sid=e3ddfb99-a1a7-46dd-a6eb-2185f3e0876a%40sessionmgr4008. - Access mode: for authorization. users. - Text: electronic.

2. ConsultantPlus [Electronic resource]: reference legal system. / LLC "Consultant Plus" - Electron. Dan. - Moscow: ConsultantPlus, [2020].

3. Databases of periodicals:

3.1. Database of periodicals: electronic journals / LLC IVIS. - Moscow, [2021]. - URL: https://dlib.eastview.com/browse/udb/12. - Access mode: for authorization users. - Text: electronic.

3.2. eLIBRARY.RU: scientific electronic library: site / Scientific Electronic Library LLC. - Moscow, [2021]. - URL: http://elibrary.ru. - Access mode: for authorization users. - Text: electronic

3.3. "Grebennikon": electronic library / ID Grebennikov. - Moscow, [2021]. - URL: https://id2.actionmedia.ru/Personal/Products. - Access mode: for authorization users. - Text: electronic.

4. National Electronic Library: Electronic Library: Federal State Information System: website / Ministry of Culture of the Russian Federation; RSL. - Moscow, [2021]. - URL: http: //www.studentlibrary.ru/pages/catalogue.html https: //neb.rf. - Access mode: for users of the scientific library. - Text: electronic.

5. SMART Imagebase // EBSCOhost: [portal]. - URL: https://ebsco.smartimagebase.com/?TOKEN=EBSCO-

1a2ff8c55aa76d8229047223a7d6dc9c&custid=s6895741. - Access mode: for authorization users. - Image: electronic.

6. Federal information and educational portals:

6.1. Single window of access to educational resources: federal portal / founder of FGAOU DPO TsRGOP and IT. - URL: http://window.edu.ru/. - Text: electronic.

6.2. Russian education: federal portal / founder of FGAOU DPO TsRGOP and IT. - URL: http://www.edu.ru. - Text: electronic.

7. Educational resources of UlSU:

7.1. Electronic library of UlSU: module ABIS Mega-PRO / Data Express LLC. - URL: http://lib.ulsu.ru/MegaPro/Web. - Access mode: for users of the scientific library. - Text: electronic.

Ministry of Science and Higher Education of the Russian Federation Ulyanovsk State University	Форма	
f- Educational program of the discipline		U

7.2. UISU educational portal. - URL: http://edu.ulsu.ru. - Access mode: for register. users. -Text:electronic.

#### **AGREED:**

date Position of information technology Department employee full name signature 6)

Ministry of Science and Higher Education of the Russian Federation Ulyanovsk State University	Форма	
f- Educational program of the discipline		U

# LIST OF CHANGES

to the work program« Anesthesiology, esuscitation and intensive care» specialty 31.05.01 «General Medicine»

Nº ite m nu mb er	Content of the change or a link to the attached text of the change	full name of the head of the Department implementing the discipline	Signature	Date
1	Introduction of changes to item C) Professional databases, information and reference systems item 11 "Educational, methodological and information support of the discipline" with the design of Appendix 1	Midlenko V. I.	D	30.08.22
2	Introduction of changes to item A) Recommended Literature item 11 "Educational,methodological and information support of the discipline" with the design of Appendix 2	Midlenko V. I.	D	30.08.22

Ministry of science and high education RF Ulyanovsk State University	Form	
f-Educational plan of the discipline		

#### 11. EDUCATIONAL-METHODOLOGICAL AND INFORMATION SUPPORT OF DISCIPLINE

#### a) List of recommended literature

#### a) Core reading:

 Anesthesiology: national leadership [Electronic resource]. - M.: GEOTAR-Media, 2017.656 p. ISBN 978-5-9704-3953-1 URL:

http://www.studentlibrary.ru/book/ISBN9785970439531.html

2. Intensive therapy [Electronic resource]. - M .: GEOTAR-Media, 2017.928 p . ISBN 978-5-9704-4161-9 URL: http://www.studentlibrary.ru/book/ISBN9785970441619.html

#### b) Supplementary reading:

- 3. Kai Matthes; Richard Urman; Jesse Ehrenfeld. Anesthesiology: A Comprehensive Board Review for Primary and Maintenance of Certification Oxford : Oxford University Press. 2013. eBook. https://search.ebscohost.com/login.aspx?direct=true&db=e600xww&AN=603924&site=ehost -live&scope=site
- Raj K. Modak. Anesthesiology Keywords Review Edition: Second edition. Philadelphia, PA : LWW. 2013. eBook.

https://search.ebscohost.com/login.aspx?direct=true&db=nlebk&AN=1473202&site=ehostlive&scope=site

#### c) Educational and methodical literature

- 5. Prevention and treatment of the syndrome of acute gastric injury [Electronic resource]: electron, study, course; study guide for honey, universities / V.I. Midlenko [and others]. -Electron. text data. - Ulyanovsk: UISU, 2016. - (Electronic training course). - CD - ROM /
- 6. Diseases of the operated stomach [Electronic resource]: study guide / V.I. Midlenko [et a1]; UISU, IMEiFK. - Electronic text data. (1 file: 1.10 MB).- Ulyanovsk: UIS, 2017.
- 7. Zaytseva O.B, Parmenov A.E. Methodological guidelines for self-study work of students in the discipline "Anesthesiology, reanimatology and intensive care"/ O.B. Zaytseva, A.E. Parmenov; Ulyanovsk State University, The Institute of Medicine, Ecology and Physical Culture. - Ulyanovsk: UISU, 2022. - Неопубликованный ресурс; на англ. яз. - URL: http://lib.ulsu.ru/MegaPro/Download/MObject/11548. - Режим доступа: ЭБС УлГУю -Текст: электронный.

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Ministry of science and high education RF	Form	
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F-Educational plan of the dicipline		

Профессиональные базы данных, информационно-справочные системы

## 1. Электронно-библиотечные системы:

1.1. Цифровой образовательный ресурс IPRsmart : электронно-библиотечная система : сайт / ООО Компания «Ай Пи Ар Медиа». - Саратов, [2022]. – URL: http://www.iprbookshop.ru. – Режим доступа: для зарегистрир. пользователей. - Текст : электронный.

1.2. Образовательная платформа ЮРАЙТ : образовательный ресурс, электронная библиотека : сайт / ООО Электронное издательство ЮРАЙТ. – Москва, [2022]. - URL: https://urait.ru. – Режим доступа: для зарегистрир. пользователей. - Текст : электронный.

1.3. Консультант врача. Электронная медицинская библиотека : база данных : сайт / ООО Высшая школа организации и управления здравоохранением-Комплексный медицинский консалтинг. – Москва, [2022]. – URL: <u>https://www.rosmedlib.ru</u>. – Режим доступа: для зарегистрир. пользователей. – Текст : электронный.

1.4. Большая медицинская библиотека : электронно-библиотечная система : сайт / ООО Букап. – Томск, [2022]. – URL: <u>https://www.books-up.ru/ru/library/</u>. – Режим доступа: для зарегистрир. пользователей. – Текст : электронный.

1.5. ЭБС Лань : электронно-библиотечная система : сайт / ООО ЭБС Лань. – Санкт-Петербург, [2022]. – URL: https://e.lanbook.com. – Режим доступа: для зарегистрир. пользователей. – Текст : электронный.

1.6. ЭБС Znanium.com : электронно-библиотечная система : сайт / ООО Знаниум. - Москва, [2022]. - URL: <u>http://znanium.com</u>. – Режим доступа : для зарегистрир. пользователей. - Текст : электронный.

1.7. Clinical Collection : научно-информационная база данных EBSCO // EBSCOhost : [портал]. – URL: <u>http://web.b.ebscohost.com/ehost/search/advanced?vid=1&sid=9f57a3e1-1191-414b-8763-e97828f9f7e1%40sessionmgr102</u>. – Режим доступа : для авториз. пользователей. – Текст : электронный.

1.8. База данных «Русский как иностранный» : электронно-образовательный ресурс для иностранных студентов : сайт / ООО Компания «Ай Пи Ар Медиа». – Саратов, [2022]. – URL: https://ros-edu.ru. – Режим доступа: для зарегистрир. пользователей. – Текст : электронный.

**2. КонсультантПлюс** [Электронный ресурс]: справочная правовая система. /ООО «Консультант Плюс» - Электрон. дан. - Москва : КонсультантПлюс, [2022].

3. Базы данных периодических изданий:

3.1. База данных периодических изданий EastView : электронные журналы / ООО ИВИС. - Москва, [2022]. – URL: https://dlib.eastview.com/browse/udb/12. – Режим доступа : для авториз. пользователей. – Текст : электронный.

3.2. eLIBRARY.RU: научная электронная библиотека : сайт / ООО Научная Электронная Библиотека. – Москва, [2022]. – URL: http://elibrary.ru. – Режим доступа : для авториз. пользователей. – Текст : электронный

3.3. Электронная библиотека «Издательского дома «Гребенников» (Grebinnikon) : электронная библиотека / ООО ИД Гребенников. – Москва, [2022]. – URL: https://id2.actionmedia.ru/Personal/Products. – Режим доступа : для авториз. пользователей. – Текст : электронный.

**4.** Федеральная государственная информационная система «Национальная электронная библиотека» : электронная библиотека : сайт / ФГБУ РГБ. – Москва, [2022]. – URL: https://нэб.рф. – Режим доступа : для пользователей научной библиотеки. – Текст : электронный.

**5. SMART Imagebase** : научно-информационная база данных EBSCO // EBSCOhost : [портал]. – URL: <u>https://ebsco.smartimagebase.com/?TOKEN=EBSCO-</u>

Ministry of science and high education RF	Form	
Ulyanovsk State University		
F-Educational plan of the dicipline		

<u>1a2ff8c55aa76d8229047223a7d6dc9c&custid=s6895741</u>. – Режим доступа : для авториз. пользователей. – Изображение : электронные.

6. Федеральные информационно-образовательные порталы:

6.1. Единое окно доступа к образовательным ресурсам : федеральный портал . – URL: http://window.edu.ru/. – Текст : электронный.

6.2. Российское образование : федеральный портал / учредитель ФГАУ «ФИЦТО». – URL: http://www.edu.ru. – Текст : электронный.

#### 7. Образовательные ресурсы УлГУ:

7.1. Электронная библиотечная система УлГУ : модуль «Электронная библиотека» АБИС Мега-ПРО / ООО «Дата Экспресс». – URL: http://lib.ulsu.ru/MegaPro/Web. – Режим доступа : для пользователей научной библиотеки. – Текст : электронный.

Пата 19.04.22 Согласовано: <u>Зами нап УИХ I Киренова ВЗ</u> объжность сотрудника УИТИТ ФИО

Ministry of Science and Higher Education of the Russian Federation Ulyanovsk State University	Форма	
f- Educational program of the discipline		U

# LIST OF CHANGES

to the work program« Anesthesiology, esuscitation and intensive care» specialty 31.05.01 «General Medicine»

Nº ite m nu mb er	Content of the change or a link to the attached text of the change	full name of the head of the Department implementing the discipline	Signature	Date
1	Introduction of changes to item C) Professional databases, information and reference systems item 11 "Educational,methodological and information support of the discipline" with the design of Appendix 1	Midlenko V. I.	A	10.05.23
2	Introduction of changes to item A) Recommended Literature item 11 "Educational,methodological and information support of the discipline" with the design of Appendix 2	Midlenko V. I.	D	10.05.23

Ministry of Science and Higher Education of the Russian Federation Ulyanovsk State University	Форма	
f- Educational program of the discipline		

# 11 . EDUCATIONAL-METHODOLOGICAL AND INFORMATION SUPPORT OF DISCIPLINE

# a) List of recommended literature

## a) Core reading:

- Carlos M H Gomez. Clinical Intensive Care Medicine / Carlos M H Gomez. New Jersey : Imperial College Press. - Locals. - PDF; EPUB. - URL: <u>http://search.ebscohost.com/login.aspx?direct=true&db=e600xww&AN=839688&site=ehost-live</u>. - Полный текст. - eBook Clinical Collection (EBSCOHost). - ISBN 9781848163891. -ISBN 9781848163898. - ISBN 9781783263134.
- 2. Edward Scarth. Drugs in Anaesthesia and Intensive Care / Edward Scarth, Susan Smith. Fifth edition. Oxford : OUP Oxford. Locals. PDF; EPUB. URL: <u>http://search.ebscohost.com/login.aspx?direct=true&db=e600xww&AN=1109706&site=ehost-live</u>. Полный текст. eBook Clinical Collection (EBSCOHost). ISBN 9780198768814. ISBN 9780191081484. ISBN 9780191081477.

# b) Supplementary reading:

- Godoy, Daniel Agustin. Intensive Care in Neurology and Neurosurgery : Pathophysiological Basis for the Management of Acute Cerebral Injury / Godoy, Daniel Agustin. - First edition. -Torino, Italy : SEEd. - Locals. - PDF; EPUB. - URL: <u>http://search.ebscohost.com/login.aspx?direct=true&db=e600xww&AN=781110&site=ehost-</u> <u>live</u>. - Полный текст. - eBook Clinical Collection (EBSCOHost). - ISBN 9788897419396. -ISBN 9788897419402.
- Procedural Sedation for Infants, Children, and Adolescents / American Academy of Pediatrics Section on Anesthesiology and Pain Medicine, Joseph D. Tobias, Joseph P Cravero. - Elk Grove Village, IL : American Academy of Pediatrics. - Locals. - PDF. - URL: <u>http://search.ebscohost.com/login.aspx?direct=true&db=e600xww&AN=1057965&site=ehostlive</u>. - Полный текст. - eBook Clinical Collection (EBSCOHost). - ISBN 9781581109337. -ISBN 9781581109344.
- 5. Yao & Artusio's Anesthesiology : Problem-Oriented Patient Management / Fun-Sun F. Yao. 8th ed. Philadelphia : Lippincott Williams and Wilkins. Locals. EPUB. URL:

<u>https://search.ebscohost.com/login.aspx?direct=true&db=e600xww&AN=2966870&site=ehost-live&scope=site</u> . - Полный текст. - eBook Clinical Collection (EBSCOHost). - ISBN 9781496311702. - ISBN 9781496342911.

# c) Educational and methodical literature

6. Zaytseva O.B. Methodological instructions for independent work of students in the discipline «Anesthesiology, resuscitation and intensive care» for the specialties 31.05.01 «General medicine», 31.05.02 «Pediatrics», 31.05.01 «General medicine (with the development of part of the program in english)» / O. B. Zaytseva, A. E. Parmenov. – Ульяновск : УлГУ, 2022. - 7 с. - Неопубликованный ресурс. –

URL: <u>http://lib.ulsu.ru/MegaPro/Download/MObject/13467</u>. - Режим доступа: ЭБС УлГУ. - Текст : электронный

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## c) Software:

# d) Professed data base, directory and search systems:

# 1. Electronic library systems:

- IPRbooks: electronic library system: website / IP Ar Media Group of companies. Saratov, [2023]. - URL: http://www.iprbookshop.ru. - Access mode: for registration. users. - Text : electronic.
- YURAYT : electronic library system: website / LLC Electronic publisher YURAYT. -Moscow, [2023]. - URL: https://urait.ru. - Access mode: for registration. users. - Text : electronic.
- 1.3. Student's consultant : electronic library system: website / Poly-techresurs LLC. Moscow, [2023]. – URL: https://www.studentlibrary.ru/cgi-bin/mb4x. - Access mode: for registered users. users. - Text : electronic.
- 1.4. Doctor's consultant: electronic library system: website / LLC Higher School of Organization and Management of Healthcare-Comprehensive medical consulting. Moscow, [2023]. URL: https://www.rosmedlib.ru. Access mode: for registration. users. Text : electronic.
- 1.5. Big medical library: electronic library system: website / LLC Bukap. Tomsk, [2023]. URL: https://www.books-up.ru/ru/library/ . - Pre-stop mode: for registration. users. - Text : electronic.
- 1.6. Lan: electronic library system: website / EBS Lan LLC. St. Petersburg, [2023]. URL: https://e.lanbook.com. Access mode: for registered users. users. Text : electronic.
- 1.7. Znanium.com : electronic library system: website / Znanium LLC. Moscow, [2023]. URL: http://znanium.com . Access mode : for registered users. pol-callers. Text : electronic.
- **2. Consultant Plus** [Electronic resource]: reference legal system. / LLC "Consultant Plus" Electron. dan. Moscow: Consultant Plus, [2023].

#### **3.** Databases of periodicals:

- 3.1. eLIBRARY.RU: scientific electronic library: website / Scientific Electronic Library LLC. -Moscow, [2023]. - URL: http://elibrary.ru. - Access mode : for authorization. users. - Text : electronic
- 3.2. "Grebennikon": electronic library / ID Grebennikov. Moscow, [2023]. URL: https://id2.action-media.ru/Personal/Products. - Access mode : for authorization. users. - Text : electronic.
- **4. National Electronic Library**: electronic library: federal State information system: website / Ministry of Culture of the Russian Federation; RGB - Moscow, [2023]. URL: https://нэб.рф. Access mode : for users of the scientific library. Text : electronic.
- **5. Russian education:** federal portal / founder of the FSAOU DPO TSRGOP and IT. URL: http://www.edu.ru. Text : electronic.
- **6. Electronic library of USU:** module ABIS Mega-PRO / LLC "Date Express". URL: http://lib.ulsu.ru/MegaPro/Web. Access mode : for users of the scientific library. Text : electronic.

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Form A

Ministry of Science and Higher Education of the Russian Federation Ulyanovsk State University	Форма	
f- Educational program of the discipline		Y

# LIST OF CHANGES

to the work program« Anesthesiology, esuscitation and intensive care» specialty 31.05.01 «General Medicine»

Nº ite m nu mb er	Content of the change or a link to the attached text of the change	full name of the head of the Department implementing the discipline	Signature	Date
	Introduction of changes to item C) Professional databases, information and reference systems item 11 "Educational,methodological and information support of the discipline" with the design of Appendix 1	Midlenko V. I.	A	16.05.24
	Introduction of changes to item A) Recommended Literature item 11 "Educational,methodological and information support of the discipline" with the design of Appendix 2	Midlenko V. I.	D	16.05.24



# 11 . EDUCATIONAL-METHODOLOGICAL AND INFORMATION SUPPORT OF DISCIPLINE

# a) List of recommended literature

# a) Core reading:

- 3. Carlos M H Gomez. Clinical Intensive Care Medicine / Carlos M H Gomez. New Jersey : Imperial College Press. - Locals. - PDF; EPUB. - URL: <u>http://search.ebscohost.com/login.aspx?direct=true&db=e600xww&AN=839688&site=ehost-live</u>. - Полный текст. - eBook Clinical Collection (EBSCOHost). - ISBN 9781848163891. -ISBN 9781848163898. - ISBN 9781783263134.
- Edward Scarth. Drugs in Anaesthesia and Intensive Care / Edward Scarth, Susan Smith. -Fifth edition. - Oxford : OUP Oxford. - Locals. - PDF; EPUB. - URL: <u>http://search.ebscohost.com/login.aspx?direct=true&db=e600xww&AN=1109706&site=ehost-live</u>. - Полный текст. - eBook Clinical Collection (EBSCOHost). - ISBN 9780198768814. -ISBN 9780191081484. - ISBN 9780191081477.

# b) Supplementary reading:

- Godoy, Daniel Agustin. Intensive Care in Neurology and Neurosurgery : Pathophysiological Basis for the Management of Acute Cerebral Injury / Godoy, Daniel Agustin. - First edition. -Torino, Italy : SEEd. - Locals. - PDF; EPUB. - URL: <u>http://search.ebscohost.com/login.aspx?direct=true&db=e600xww&AN=781110&site=ehostlive</u>. - Полный текст. - eBook Clinical Collection (EBSCOHost). - ISBN 9788897419396. -ISBN 9788897419402.
- Procedural Sedation for Infants, Children, and Adolescents / American Academy of Pediatrics Section on Anesthesiology and Pain Medicine, Joseph D. Tobias, Joseph P Cravero. - Elk Grove Village, IL : American Academy of Pediatrics. - Locals. - PDF. - URL: <u>http://search.ebscohost.com/login.aspx?direct=true&db=e600xww&AN=1057965&site=ehostlive</u>. - Полный текст. - eBook Clinical Collection (EBSCOHost). - ISBN 9781581109337. -ISBN 9781581109344.
- 5. Yao & Artusio's Anesthesiology : Problem-Oriented Patient Management / Fun-Sun F. Yao. 8th ed. Philadelphia : Lippincott Williams and Wilkins. Locals. EPUB. URL:
- <u>https://search.ebscohost.com/login.aspx?direct=true&db=e600xww&AN=2966870&site=ehost-live&scope=site</u>. Полный текст. eBook Clinical Collection (EBSCOHost). ISBN 9781496311702. ISBN 9781496342911.

# c) Educational and methodical literature

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URL: <u>http://lib.ulsu.ru/MegaPro/Download/MObject/13467</u>. - Режим доступа: ЭБС УлГУ. - Текст : электронный

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Form A			Страница 31из 32

Ministry of Science and Higher Education of the Russian Federation Ulyanovsk State University	Форма	l
f- Educational program of the discipline		

# c) Software:

## d) Professed data base, directory and search systems:

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- 1.2. YURAYT : electronic library system: website / LLC Electronic publisher YURAYT. -Moscow, [2024]. - URL: https://urait.ru. - Access mode: for registration. users. - Text : electronic.
- 1.3. Student's consultant : electronic library system: website / Poly-techresurs LLC. Moscow, [2024]. URL: https://www.studentlibrary.ru/cgi-bin/mb4x. Access mode: for registered users. users. Text : electronic.
- 1.4. Doctor's consultant: electronic library system: website / LLC Higher School of Organization and Management of Healthcare-Comprehensive medical consulting. Moscow, [2024]. URL: https://www.rosmedlib.ru. Access mode: for registration. users. Text : electronic.
- 1.5. Big medical library: electronic library system: website / LLC Bukap. Tomsk, [2024]. URL: https://www.books-up.ru/ru/library/ . - Pre-stop mode: for registration. users. - Text : electronic.
- 1.6. Lan: electronic library system: website / EBS Lan LLC. St. Petersburg, [2024]. URL: https://e.lanbook.com. Access mode: for registered users. users. Text : electronic.
- 1.7. Znanium.com : electronic library system: website / Znanium LLC. Moscow, [2024]. URL: http://znanium.com . Access mode : for registered users. pol-callers. Text : electronic.
- **2. Consultant Plus** [Electronic resource]: reference legal system. / LLC "Consultant Plus" Electron. dan. Moscow: Consultant Plus, [2024].

# 3. Databases of periodicals:

- 3.1. eLIBRARY.RU: scientific electronic library: website / Scientific Electronic Library LLC. -Moscow, [2024]. - URL: http://elibrary.ru. - Access mode : for authorization. users. - Text : electronic
- 3.2. "Grebennikon": electronic library / ID Grebennikov. Moscow, [2024]. URL: https://id2.action-media.ru/Personal/Products. - Access mode : for authorization. users. - Text : electronic.
- **4. National Electronic Library**: electronic library: federal State information system: website / Ministry of Culture of the Russian Federation; RGB - Moscow, [2024]. URL: https://нэб.рф. Access mode : for users of the scientific library. Text : electronic.
- **5. Russian education:** federal portal / founder of the FSAOU DPO TSRGOP and IT. URL: http://www.edu.ru. Text : electronic.
- **6. Electronic library of USU:** module ABIS Mega-PRO / LLC "Date Express". URL: http://lib.ulsu.ru/MegaPro/Web. - Access mode : for users of the scientific library. - Text : electronic.

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