MINISTRY OF HEALTH OF UKRAINE
ODESSA NATIONAL MEDICAL UNIVERSITY

«I APPROVE»
Vice-rector for scientific and pedagogical work
prof. _____ Shmakova IP
" " _____ 2020

STUDY PROGRAM ON THE DISCIPLINE

"SIMULATION MEDICINE"

training of specialists of the second (master's) level of higher education in the field of knowledge 22 "Health Care" in higher educational institutions of the Ministry of Health of Ukraine in the specialty 222 "Medicine"

Faculty: medical;
form of study: full-time.
Department of Robotic and Endoscopic Surgery

The scope of the discipline:

The structure of the discipline	Number of hours				Types of control
	Total hours / credits	Auditorial		ISW	
		Lecture	Practice		
Simulation medicine	90/3	2/0,07	34/1,13	54/1,8	Current control, credit
Total	**90/3**	**2/0,07**	**34/1,13**	**54/1,8**	

The study program was created by: prof. Malinovsky AV, assistant. Yehorenko OS, assistant. PhD Pervak MP, assistant. Korchovy DV, on the basis of the educational-professional program of the second level of higher education for the preparation of masters in the specialty 222 "Medicine" ONMedU, approved by the Academic Council of ONMedU from 04.06.2020 (Protocol № 11).

The program was discussed at a meeting of the department. Protocol № 1 dated August 27, 2020
Head of the Department _____ MD, prof. Malinovsky AV

The program was approved at a meeting of the subject-cycle methodical commission on surgical disciplines. Protocol №1 dated 29.08.2020
Chairman of the subject cycle methodical commission on surgical disciplines
_____ prof. Mishchenko VV

The program was approved at a meeting of the Central Coordination and Methodological Council of ONMedU. Protocol № 1 dated 16.09.2020

Additions and changes in the work program for the 20___ - 20___ academic year.

The following changes are made to the work program:

The work program was considered and approved at the meeting of the department.
Protocol № ___ from ___.___. 202_
Head of the department _____ prof. Malinovsky AV

The changes were approved at a meeting of the subject cycle methodological commission.
Protocol № ___ from ___.___. 202_
Chairman of the subject cycle methodical commission _____ prof. Mishchenko VV

I approve the changes and additions
Vice-rector for scientific and pedagogical work _____
___.___. 202_ p.

INTRODUCTION

The program of study of the discipline "Surgical Diseases" is made in accordance with the educational-professional program of the second level of higher education for master's degree in 222 "Medicine" ONMedU, approved by the Academic Council of ONMedU from 04.06.2020 (Protocol № 11).

1. EXPLANATORY NOTE

The subject of study of the discipline "Simulation Medicine" is the consolidation and development of the principles of emergency care and the implementation of medical skills. The curriculum for the discipline "Simulation Medicine" for students of higher medical educational institutions of III-IV levels of accreditation was drawn up for the specialty 222 "Medicine" of the educational qualification "Master of Medicine" in accordance with the educational and professional program 222 "Medicine".

In accordance with the curriculum, the study of the discipline "Simulation Medicine" is carried out in the 6th year, in the XI - XII semesters. The organization of the educational process is carried out according to the European credit and transfer system of the organization of the educational process (ECTS).

Object of activity - preservation of public health, prevention and treatment of urgent human diseases.

Interdisciplinary connections: based on the study by students of normal and pathological anatomy, medical biology, medical and biological physics, bioorganic and biological chemistry, microbiology, virology and immunology, anesthesiology and intensive care, propaedeutic of internal diseases, normal and pathological physiology, clinical pharmacology, pediatrics, internal medicine, surgery, obstetrics and gynecology, the basics of psychology and interpersonal communication, lays the foundations for the formation by students of skills and abilities that are determined by the ultimate goals of the discipline and can be used by students in the study of clinical disciplines in the 6th year, during the internship and in subsequent professional activities, the formation of skills apply knowledge in the process of further education and in professional activities.

Current educational activity of students controlled in practical classes in accordance with specific objectives. The following means of diagnosing the level of students' training are used: computer tests, solving situational problems, curation of standartized thematic patients, interpretation of laboratory and instrumental research data, control of practical skills, attending simulation scenarios.

The final control of mastering the program is carried out at the end of the cycle.

Assessment of student achievement in the discipline is a rating and is set on a multi-point scale as an arithmetic mean of the material and has a definition of the ECTS system and the traditional scale adopted in.

2. PURPOSE OF STUDYING THE COURSE

The purpose of studying the discipline "Simulation Medicine" is the acquisition and formation by each student of specific knowledge, skills and competencies regarding the preparation of students for professional activities.

2.1 The ultimate goals of the discipline:

- Development of the ability to demonstrate the ability to diagnose and present a treatment plan for the most common conditions that occur in hospitals of internal medicine and surgery.
- Development of the ability to demonstrate the ability to apply diagnostic methods that help in making a decision (treatment plan) for the management of various diseases that occur in hospitals of internal medicine and surgery.
- Formation of the ability to apply the principles of evidence-based medicine in making diagnostic and therapeutic decisions in diseases that occur in hospitals of internal medicine.
- Formation of knowledge of the main classes of drugs used in the clinic of internal medicine, the ability to apply appropriate clinical and pharmacological principles for the management of patients with the most common conditions that occur in hospitals.
- Development of the ability to demonstrate the ease of application of medical information technology and critical expert assessments of the medical literature in the diagnosis and treatment in the clinic of internal medicine.
- Develop the ability to demonstrate the ability to conduct a focused medical examination and targeted physical examination in accordance with the patient's leading complaints and medical history.
- Development of the ability to show the ability to compile medical histories and conduct a physical examination in a hospital.
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2.2 Specific objectives:

- Developing the ability to show the ability to diagnose and plan treatment for the most common diseases in the hospital.
- Development of the ability to demonstrate the ability to perform routine technical procedures, including: venipuncture, nasogastric tube insertion, Faley catheter insertion, support of vital functions, show ease of interpretation of ECG, FCG, echocardiography, ultrasound and X-rays.
- Formation of the ability to show the ability to justify and apply clinical methods to understand the manifestations of the disease in the hospital.
- Development of the ability to show a basic understanding of ethical principles and their application in the treatment of inpatients.
- Development of the ability to show an effective ability to communicate with different environments of the patient, doctors and other health professionals.
- Development of skills to show a basic understanding of how age, gender, culture, social and economic status affect the management of patients in the internal medicine clinic.
- Development of skills to demonstrate the ability to clearly and concisely, orally and in writing report the patient to other members of the treatment team with special attention to the inclusion of meaningful and synthesized clinical information.
- Development of the ability to provide emergency care in the clinic of surgical diseases and perform emergency surgical manipulations.
- Formation of the ability to work with children of different ages, providing emergency care for the most common acute disorders of vital functions.
- Formation of ethical and deontological ability to communicate with the parents of a sick child.
- Formation of knowledge of childbirth physiology.
- Formation of knowledge of the main stages of the course and conduct of physiological childbirth.
- Formation of the ability to demonstrate methods of examination of women in labor.
- Formation of the ability to correctly assess the obstetric situation, to provide the necessary assistance in physiological childbirth.

The main **tasks** of studying the educational discipline "Simulation Medicine" are:

2.3 Theoretical questions

- consolidation of knowledge of general principles and methods of providing emergency medical care;
- knowledge of the advantages and disadvantages of different methods of treatment of emergency conditions;
- be able to differentiate the clinical manifestations of various emergency conditions in the practice of a general practitioner, surgeon, obstetrician-gynecologist, pediatrician;

2.4 Practical skills

- demonstration and possession of the moral and deontological principles of a medical specialist and the principles of professional subordination in therapeutic, surgical and pediatric hospitals;
- mastering the main stages of providing emergency medical care to patients during the development of emergency conditions;
- knowledge and possession of a differentiated approach to the provision of medical care to patients in the event of emergency conditions.

2.5 Program competencies, the formation of which is provided by the discipline.

Discipline ensures that students acquire the following ***competencies***

2.5.1 Integral:

ability to solve typical and complex specialized tasks and practical problems in professional activities in the field of health care or in the learning process, which involves research and / or innovation and is characterized by complexity and uncertainty of conditions and requirements;

2.5.2 General competencies (GC) (ordinal numbering according to the Educational-professional program "Medicine" from 04.06.2020):

GC2. Ability to know and understand the subject area and professional activity
GC3. Ability to communicate in the state language
GC6. Ability to work in a team
GC8. Ability to evaluate and ensure the quality of work performed
GC9. Ability to act on the basis of ethical considerations, socially responsible and conscious

2.5.3 Special (professional, subject) competencies (SC):

SC1 Communication skills and clinical examination of the patient.
SC2 Ability to determine the list of required clinical, laboratory and instrumental studies and evaluate their results.
SC3 Ability to establish a preliminary and clinical diagnosis of the disease.
SC4 Ability to determine the principles of treatment of diseases, the required mode of work and rest and the nature of nutrition.
SC5 Ability to diagnose emergencies.
SC6 Ability to determine tactics and provide emergency medical care.
SC8 Ability to perform medical manipulations.

2.6 Detailing according to NQF descriptors in the form of "Competence Matrix".

Competence matrix

№	Competence	Knowledge	Skills	Communication	Autonomy and responsibility
1	2	3	4	5	6
Integral competence					
Ability to solve typical and complex specialized problems and practical problems in professional activities in the field of health care or in the learning process, which involves research and / or innovation and is characterized by complexity and uncertainty of conditions and requirements					
General competencies					
1	GC 2. Ability to know and understand the subject area and professional activity	Have knowledge of the structure of professional activity	Be able to carry out professional activities that require updating and integration of knowledge	Ability to effectively form a communication strategy in professional activities	To be responsible for professional development, ability to further professional training with a high level of autonomy
2	GC 3. Ability to communicate in the state language.	Know the state language at a sufficient level for communication in the medical field and maintaining appropriate documentation.	Be able to communicate in the state language.	Sharing verbal information with patients and colleagues with positive feedback.	Be responsible for the timely acquisition of modern knowledge
3	GC 6 Ability to work in a team.	Know the tactics and strategies of communication, laws and ways of communicative behavior.	Be able to choose ways and strategies of communication to ensure effective teamwork	Use communication strategies	Be responsible for the choice and tactics of communication
4	GC 8. Ability to evaluate and ensure the quality of work performed	Know the commitments and ways to accomplish the assigned tasks	Be able to define the goal and tasks, be persistent and conscientious in the performance of duties	Establish interpersonal connections to effectively complete assignments and responsibilities	Be responsible for the high-quality performance of assigned tasks
5	GC 9. Ability to act on ethical considerations	Know the basics of ethics and deontology	Be able to apply ethical and deontological norms and principles in professional activities	The ability to convey to patients, their families, colleagues their professional position	Be responsible for the implementation of ethical and deontological norms and principles in professional activities

Special (professional, subject) competencies					
1	SC 1. Communication skills and clinical examination of the patient.	Know the possible complaints and the sequence of collecting information about the disease in the patient. Know the sequence of application of the method of objective examination of the patient.	Be able to consistently collect all information about the disease from the patient's words. Be able to perform all regulated methods of examination in the appropriate sequence and evaluate the results.	Ability to establish interpersonal relationships. Ability to establish contact with the patient during an objective examination.	To be responsible for the implementation of ethical and deontological norms, for the correctness and interpretation of the results obtained during the objective examination of the patient.
2	SC 2. Ability to determine the list of required clinical, laboratory and instrumental studies and evaluate their results.	Have specialized knowledge of methods of laboratory and instrumental research	Be able to analyze the results of laboratory and instrumental research methods	Ability to communicate to the patient and specialists the list and results of research	Be responsible for the correctness and timeliness of relevant research and interpretation of their results
3	SC 3. Ability to establish a preliminary and clinical diagnosis of the disease.	Have knowledge of clinical manifestations of surgical diseases, modern classifications, criteria for establishing surgical diagnoses.	Be able to establish a preliminary and clinical diagnosis of surgical pathology in accordance with modern classifications and criteria for establishing surgical diagnoses.	It is reasonable to form and bring to the patient and specialists the conclusions of the diagnostic results.	Be responsible for timely and correct diagnosis.
4	SC 4. Ability to determine the principles of treatment of diseases, the required mode of work and rest and the nature of nutrition.	Have specialized knowledge of algorithms and treatment schemes for surgical diseases.	Be able to choose the necessary set of therapeutic measures depending on the pathological condition.	It is reasonable to form and bring to the patient and specialists conclusions about the appropriate treatment of the patient. Be able to record appointments in medical records.	Be responsible for the timeliness and correctness of the choice of treatment program for a patient with surgical pathology.
5	SC 5. Ability to diagnose emergencies.	Have knowledge of clinical manifestations and stages of development of emergencies	Be able to quickly detect and diagnose emergencies, be able to organize an appropriate diagnostic	Use communication strategies and interpersonal skills.	Be responsible for the timely detection and assessment of the patient's condition

			program.		
6	SC 6. Ability to determine tactics and provide emergency medical care.	Have specialized knowledge about urgent human conditions; know the algorithms of first aid.	Be able to consistently and correctly perform first aid measures in accordance with the emergency.	Use communication strategies and interpersonal skills.	Be responsible for the correctness and consistency of first aid.
7	SC8 Ability to perform medical manipulations.	Have specialized knowledge of anatomy and normal physiology. Knowledge of algorithms for performing medical procedures and manipulations: blood pressure measurement, venipuncture, vein catheterization, intravenous transfusion, subcutaneous, intramuscular injection, bladder catheterization, gastric lavage with a probe, enema, shaving the operating field.	Be able to perform a medical procedure or perform medical manipulation according to the algorithm.	It is reasonable to form and bring to the patient's conclusions about the need for a particular medical procedure or manipulation.	Be responsible for the quality of a medical procedure or manipulation.

2.7 Program learning results for the discipline:

PLR 1 Have communication skills and clinical examination of the patient. Collect data on patient complaints, medical history, life history.

PLR 2 Evaluate diagnosis information using a standard procedure, based on the results of laboratory and instrumental studies. Determine the list of necessary clinical, laboratory and instrumental studies and evaluate their results (according to list 4).

PLR 3 Highlight the leading clinical symptom or syndrome (according to list 1). Establish a preliminary diagnosis, make a differential diagnosis and determine the clinical diagnosis of the disease (according to list 2).

PLR 4 To determine the principles of treatment of diseases, the necessary mode of work and rest, the nature of nutrition (according to list 2).

PLR 5 Diagnose emergencies (according to list 3).

PLR 6 Define tactics and provide emergency medical care (according to list 3).

PLR 8 Perform medical manipulations (according to list 5).

PLR 18 Adhere to the requirements of ethics, bioethics and deontology in their professional activities.

2.8 Learning outcomes for the discipline:

2.8.1 Know:

- Anatomical structure of the cardiovascular and respiratory systems in adults and children of different

ages

- Indications and contraindications, complications, methods, algorithm and technique of cardiopulmonary resuscitation in adults and children of different ages.
- Know the methods of general examination. The concept of palpation, percussion and auscultation. The concept of ECG.
- Pathological changes of the cardiovascular and respiratory systems of adults and children of different ages.
- Physiological features of blood circulation and respiration in adults and children of different ages.
- Pathogenesis of hypoxia of brain cells.
- Pharmacokinetics, pharmacodynamics and side effects of drugs used in the care of emergencies in adults and children of all ages.
- Algorithm and protocols for treatment of patients;
- The concept of precursors of childbirth, signs of childbirth.
- Features of the clinical course and tactics of the first period of childbirth.
- Features of the clinical course and tactics of the II period of childbirth.
- Features of the clinical course and tactics of the III period of childbirth.
- Principles of assessment of the condition of the newborn on the Apgar scale, the primary toilet of the newborn.
- Indications for the following urgent manipulations:
- pleural puncture
- conicotomy
- pericardial puncture.
- Fundamentals of psychology;
- Aspects of interpersonal communication;
- Ethics and deontology.

2.8.2 Be able to:

- Orient in the anatomical structure of the cardiovascular and respiratory systems in adults and children of different ages.
- Name the indications and contraindications, complications, methods, algorithms and techniques of cardiopulmonary resuscitation in adults and children of different ages.
- Be able to conduct a general examination (palpation, percussion, auscultation, blood pressure measurement, etc.). Be able to analyze ECG results.
- Name the pathological changes of the cardiovascular and respiratory systems of man
- Orient in the physiological features of blood circulation and respiration in adults and children of different ages.
- Determine hypoxia of brain cells.
- Focus on dosages, pharmacokinetics, pharmacodynamics and side effects of drugs used in the care of emergencies.
- Determine the sequence of actions in providing emergency care.
- Perform the necessary manipulations.
- Monitor the patient's condition after performing practical skills.
- Collect and evaluate obstetric history.
- Perform external and internal pelviometry.
- Conduct an external obstetric examination (Leopold's techniques).
- Determine the estimated weight of the fetus.
- Conduct an internal obstetric examination.
- Establish the term of pregnancy and the expected term of childbirth (according to the anamnesis and objective research).
- Evaluate the heartbeat of the fetus and the results of the study of the feto-placental complex.
- Determine the period and phase of labor.
- Provide obstetric care in childbirth and the postpartum period.
- Assess the condition of the newborn on the Apgar scale.
- Be able to differentiate the clinical manifestations of heart failure in children of different ages.

- Provide psychological assistance to patients;
- Solve deontological problems related to professional activities.
- Have professional communication skills.

2.8.3 Master the skills:

- Temporary stop of external bleeding.
- Primary surgical treatment.
- Transport immobilization.
- Pleural puncture.
- Technique of laparocentesis.
- Catheterization of the urinary bladder.
- Cardio-pulmonary resuscitation.

3. STRUCTURE AND CONTENT OF THE COURSE

3.1 Structured curriculum for the discipline «SIMULATION MEDICINE»:

The structure of the discipline	Number of hours / of them				Year of study	Types of control
	Total hours / credits	Auditorium		ISW		
		Lecture	Practice			
Simulation medicine	90/3	2/0,07	34/1,13	54/1,8	6	Current control, **credit**
Total	**90/3**	**2/0,07**	**34/1,13**	**54/1,8**	**6**	

Note: 1 ECTS credit - 30 hours.
Classroom load – 40 %, ISW – 60 %

3.2 Program of the discipline

Topic 1. Basic life support

Topic 2. Emergency care for anaphylaxis in adults and children of all ages. Emergency care for hypoglycemia in adults and children of all ages. Clinical scenarios

Topic 3. Emergency care for phosphorus poisoning. Emergency care for opioid poisoning. Clinical scenarios

Topic 4. Emergency care for asystole. Emergency care for ventricular fibrillation. Clinical scenarios

Topic 5. Laparocentesis: indications, contraindications, methods, complications. Larry's pericardial puncture: indications, contraindications, methods, complications

Topic 6. Puncture of the pleural cavity: indications, contraindications, methods, complications

Topic 7. Methods of temporary cessation of external bleeding

Topic 8. Primary surgical treatment of the wound. Method of applying and removing the nodal seam. Dissection and drainage of abscesses

Topic 9. Conicotomy: indications, contraindications, methods, complications. Anterior nasal tamponade. Examination of the eye fundus

Topic 10. Emergency care for severe pneumonia in children. Emergency care for bronchial asthma in children. Clinical scenarios

Topic 11. Emergency care for meningococcemia in children. Emergency care for febrile seizures in children. Clinical scenarios

Topic 12. Emergency care for hypovolemic shock / severe dehydration. Emergency care for a full-term newborn. Assessment of the newborn on the APGAR scale. Clinical scenarios

Topic 13. Emergency care for a newborn with esophageal atresia at the stage of transportation to a surgical hospital. Emergency care for a newborn with high congenital intestinal obstruction at the stage of transportation to a surgical hospital. Clinical scenarios

Topic 14. Providing care for late adhesion intestinal obstruction. Clinical scenarios

Topic 15. Clinical examination of the mammary glands. External obstetric examination (Leopold's techniques), determination of the topography of the fetus in the uterus

Topic 16. Features of history taking in patients

Topic 17. Credit

3.3 Approximate structure of the program "Simulation medicine"

Topic	Lectures	Practical training	Seminars	Individual Students` Work
Topic 1. Basic life support	2	2	-	4
Topic 2. Emergency care for anaphylaxis in adults and children of all ages. Emergency care for hypoglycemia in adults and children of all ages. Clinical scenarios	-	2	-	4
Topic 3. Emergency care for phosphorus poisoning. Emergency care for opioid poisoning. Clinical scenarios	-	2	-	4
Topic 4. Emergency care for asystole. Emergency care for ventricular fibrillation. Clinical scenarios	-	2	-	4
Topic 5. Laparocentesis: indications, contraindications, methods, complications. Larry's pericardial puncture: indications, contraindications, methods, complications	-	2	-	2
Topic 6. Puncture of the pleural cavity: indications, contraindications, methods, complications	-	2	-	2
Topic 7. Methods of temporary cessation of external bleeding	-	2	-	2
Topic 8. Primary surgical treatment of the wound. Method of applying and removing the nodal seam. Dissection and drainage	-	2	-	2

of abscesses				
Topic 9. Conicotomy: indications, contraindications, methods, complications. Anterior nasal tamponade. Examination of the eye fundus	-	2	-	2
Topic 10. Emergency care for severe pneumonia in children. Emergency care for bronchial asthma in children. Clinical scenarios	-	2	-	4
Topic 11. Emergency care for meningococcemia in children. Emergency care for febrile seizures in children. Clinical scenarios	-	2	-	4
Topic 12. Emergency care for hypovolemic shock / severe dehydration. Emergency care for a full-term newborn. Assessment of the newborn on the APGAR scale. Clinical scenarios	-	2	-	4
Topic 13. Emergency care for a newborn with esophageal atresia at the stage of transportation to a surgical hospital. Emergency care for a newborn with high congenital intestinal obstruction at the stage of transportation to a surgical hospital. Clinical scenarios	-	2	-	4
Topic 14. Providing care for late adhesion intestinal obstruction. Clinical scenarios	-	2	-	4
Topic 15. Clinical examination of the mammary glands. External obstetric examination (Leopold's techniques), determination of the topography of the fetus in the uterus	-	2	-	4
Topic 16. Features of history taking in patients	-	4	-	4
Topic 17. Credit	-	-	-	-
Total:	**2**	**34**	**0**	**54**

Classroom load – 40 %, ISW – 60 %

3.4 Thematic plan of lectures

№	Topic	Number of hours
1.	Basic life support	2

3.5 Thematic plan of practical classes

№	Topic	Number of hours
1.	Basic life support	2
2.	Emergency care for anaphylaxis in adults and children of all ages. Emergency care for hypoglycemia in adults and children of all ages. Clinical scenarios	2
3.	Emergency care for phosphorus poisoning. Emergency care for opioid poisoning. Clinical scenarios	2
4.	Emergency care for asystole. Emergency care for ventricular fibrillation. Clinical scenarios	2
5.	Laparocentesis: indications, contraindications, methods, complications. Larry's pericardial puncture: indications, contraindications, methods, complications	2
6.	Puncture of the pleural cavity: indications, contraindications, methods, complications	2
7.	Methods of temporary cessation of external bleeding	2
8.	Primary surgical treatment of the wound. Method of applying and removing the nodal seam. Dissection and drainage of abscesses	2
9.	Conicotomy: indications, contraindications, methods, complications. Anterior nasal tamponade. Examination of the eye fundus	2
10.	Emergency care for severe pneumonia in children. Emergency care for bronchial asthma in children. Clinical scenarios	2
11.	Emergency care for meningococcemia in children. Emergency care for febrile seizures in children. Clinical scenarios	2
12.	Emergency care for hypovolemic shock / severe dehydration. Emergency care for a full-term newborn. Assessment of the newborn on the APGAR scale. Clinical scenarios	2
13.	Emergency care for a newborn with esophageal atresia at the stage of transportation to a surgical hospital. Emergency care for a newborn with high congenital intestinal obstruction at the stage of transportation to a surgical hospital. Clinical scenarios	2
14.	Providing care for late adhesion intestinal obstruction. Clinical scenarios	2
15.	Clinical examination of the mammary glands. External obstetric examination (Leopold's techniques), determination of the topography of the fetus in the uterus	2
16.	Features of history taking in patients	4
17.	Credit	
	Total:	**34**

3.6 Types of individual students` work (IWS) and their control

№	Topic	Number of hours	Types of control
1.	Management of a patient with cardiovascular diseases and anaphylactic shock.	14	Current control in practical classes
2.	Assimilation and practicing of practical skills: Conicotomy; puncture and drainage of the pleural cavity; puncture of the pericardium.	14	Abstract design of the topic
3.	Physiology of childbirth. Pain relief during labor.	12	Current control in practical classes
4.	Keeping a full-term and premature newborn baby. Primary neonatal resuscitation. Keeping a newborn baby with breathing disorders.	14	Abstract design of the topic
	Total:	**54**	

4. LIST OF QUESTIONS IN THE DISCIPLINE «SIMULATION MEDICINE» TO PREPARE STUDENTS FOR THE CREDIT.

1. Basic life support. Assessment of the condition of the victim and the scene;
2. Basic life support. Medical sorting of victims during mass casualties;
3. Basic life support. Relocation of victims by the Rautek method;
4. Basic life support. Transport immobilization of victims;
5. Basic life support. Indirect heart massage;
6. Basic life support. Ensuring airway patency: oral toilet, suction of sputum and mucus with a vacuum aspirator, removal of foreign bodies from the nose, mouth and throat;
7. Basic life support. Removal of the lower jaw;
8. Basic life support. Introduction of Safar or Guedel air duct;
9. Basic life support. Carrying out artificial ventilation of lungs by means of a bag and a mask;
10. Features of the clinical course and tactics of the first period of childbirth. Clinical scenarios.
11. Features of the clinical course and tactics of the II period of childbirth. Clinical scenarios.
12. Features of the clinical course and tactics of the III period of childbirth. Clinical scenarios.

5. LIST OF PRACTICAL SKILLS FOR THE FINAL CONTROL OF THE PROGRAM «SIMULATION MEDICINE»

1. Algorithm and technique of examination of mammary glands;
2. Algorithm and technique of puncture and drainage of the pleural cavity;
3. Algorithm and technique of conicotomy;
4. Algorithm and technique of pericardial puncture;
5. Algorithm and technique of anterior nasal tamponade;
6. Algorithm and technique of examination of the fundus;
7. Algorithm and technique for temporary cessation of bleeding;
8. Algorithm and technique of primary surgical treatment of the wound;
9. Emergency care for anaphylaxis in adults. Clinical scenarios;
10. Emergency care for anaphylaxis in children of all ages. Clinical scenarios;
11. Emergency care for hypoglycemia in adults. Clinical scenarios;

12. Emergency care for hypoglycemia in children of different ages. Clinical scenarios;
13. Emergency care for FOS poisoning. Clinical scenarios;
14. Emergency care for opioid poisoning. Clinical scenarios;
15. Emergency care for asystole poisoning. Clinical scenarios;
16. Emergency care for ventricular fibrillation poisoning. Clinical scenarios;
17. Emergency care for severe pneumonia in children of all ages. Clinical scenarios;
18. Emergency care for bronchial asthma in children of all ages. Clinical scenarios;
19. Emergency care for meningococcemia in children of different ages. Clinical scenarios;
20. Emergency care for febrile seizures in children of different ages. Clinical scenarios;
21. Emergency care for a newborn with esophageal atresia at the stage of transportation to a surgical hospital. Clinical scenarios;
22. Emergency care for a newborn with high congenital intestinal obstruction at the stage of transportation to a surgical hospital. Clinical scenarios;
23. Emergency care with late adhesion obstruction. Clinical scenarios;
24. Features of history taking in patients;
25. Primary resuscitation of newborns. Assessment of the child's condition;
26. Primary resuscitation of newborns. Carrying out artificial ventilation of lungs by means of a bag and a mask;
27. Primary resuscitation of newborns. Indirect heart massage;
28. Maintaining a healthy full-term and premature newborn. Clinical scenarios;
29. Basic life support. Management of a newborn child with respiratory disorders. Clinical scenarios.

6. FORMS OF CONTROL AND EVALUATION CRITERIA FOR STUDENTS.

6.1 Forms of control.

The current educational activities of students are monitored in practical classes in accordance with specific goals. The following tools are used for diagnosing the level of students' training: computer tests, solving situational problems, supervising thematic patients, interpreting laboratory and instrumental research data, controlling practical skills. Evaluation of the success of the study of each topic of the discipline is carried out according to the traditional 4-point scale. At a practical lesson, it is necessary to interview at least 50% of students, and at a seminar at least 30%.

The final control of the assimilation of the program is carried out at the end of the cycle.

Only those students who do not have academic debt and their average score for current educational activities in the discipline are at least 3.00 are allowed to be credited.

If a student has received a minimum grade point average of 3.00 in current performance, even in the case of unprocessed unsatisfactory grades in current performance, he / she will receive credit. The assessment of a student's progress in the discipline is rating and is set on a multi-point scale as the arithmetic mean of the mastery of the material and has a definition according to the ECTS system.

6.2 Evaluation criteria.

The university uses various forms of control of classes in a particular discipline (oral, written, combined, testing, practical skills, etc.). The results of academic success of students are presented in the form of assessment on a national scale, 200-point and ECTS scale and have standardized generalized criteria for assessing knowledge:

national scale:

- the grade "excellent" is given to the student who systematically worked during a semester, showed during examination various and deep knowledge of a program material, is able to successfully carry out tasks which are provided by the program, has mastered the maintenance of the basic and additional literature, has understood interrelation of separate sections of discipline. importance for

the future profession, showed creative abilities in understanding and using educational material, showed the ability to independently update and replenish knowledge; level of competence - high (creative);

- a grade of "good" is given to a student who has shown full knowledge of the curriculum, successfully completes the tasks provided by the program, mastered the basic literature recommended by the program, showed a sufficient level of knowledge of the discipline and is able to independently update and update during further study and professional activity; level of competence - sufficient (constructive-variable);

- the grade "satisfactory" is given to the student who has shown knowledge of the basic educational program material in the volume necessary for the further training and the subsequent work on a profession, copes with performance of the tasks provided by the program, has made separate mistakes in answers on examination and at performance of examination tasks, but has the necessary knowledge to overcome mistakes under the guidance of a researcher; level of competence - average (reproductive);

- the grade "unsatisfactory" is given to the student who did not show sufficient knowledge of the basic educational program material, made fundamental mistakes in performance of the tasks provided by the program, cannot use the knowledge at the further training without the teacher's help, failed to master skills of independent work; the level of competence is low (receptive-productive).

Multi-point scale characterizes the actual success of each student in mastering the discipline. Conversion of the traditional grade from the discipline to 200-point is performed by the information and computer center of the university program "Contingent" by the formula:

average grade (current / total discipline) x 40

national grade	points
«5»	185-200
«4»	151-184
«3»	120-150

7. SOURCES OF INFORMATION

7.1 Basic literature:

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