# Federal State-Funde Educational Institution of Higher Education «Dagestan State Medical University» under Health Ministry of the Russian Federation (FSFEI of HE under Health Ministry of the Russian Federation)



#### **WORK PROGRAMME**

of the discipline «SimulationTraining in Nursing Care»

Index of the discipline — <u>Б1.В.ОД.5</u>

Specialty — <u>31.05.01 General Medicine</u>

Level of the higher education- <u>specialist programme</u>

Graduate's qualification — <u>Medical Doctor</u>

Faculty- <u>therapeutic</u>

Department- Medical Simulation and Practice

Course of study- <u>full-term</u>

Academic year- <u>2</u>

Semester- III

Total labor intensity (in credit units/hours)- <u>3 c.u. / 108 hours</u>

Lectures- <u>8 hours</u>

Practical classes- <u>34 hours</u>

Students' self-study - <u>66 hours</u>

Form of assessment- credit-test in the III semester

Makhachkala - 2020r.

The work programme of the discipline is developed in accordance with the Federal State Educational Standards of Higher Education in the specialty 31.05. 01 General Medicine, approved by order No. 95 (of 09.02.2016) of the Ministry of Education and Science, RF.

The work programme was approved by the Department of Medical Simulation and Educational Practice on August 26, 2020.

The work programme is coordinated with:

1. Director of the SL DSMU

2. Head of DAMS,S and CES

3. Dean of the Therapeutic Department

Rasul Abakarovich Koichuev

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#### Developed by:

- 1. Koichuev Rasul Abakarovich acting Head of the Department of Medical Simulation and Educational Practice
- **2. Aliev Basir Omarovich** C.M.S., Associate Professor of the Department of Medical Simulation and Educational Practice
- **3.** Aisaeva Bakhu Magomedkhabibovna graduate Teaching Assistant at the Department of Medical Simulation and Educational Practice
- 4. Azizkhanova Angela Emirsultanovna- C.P.S, Associate Professor of the Department of Foreign and Latin Languages

#### Reviewed by:

- 1. Mejidov Rasul Tenchaevich DM, Professor, Head of the Department of General Surgery, DSMU
- 2. 2. Balkizov Zalim Zamirovich C.M.S., Associate Professor of the Department of Hospital Surgery of Pirogov Russian National Research Medical University, member of the Coordination Council for the Development of Continuous Medical and Pharmaceutical Education of the Health Ministry of Russia, official representative of AMEE, Deputy Chairman of the ASMOK Board.

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3. Dean of the Therapeutic Department	(R.M. Ragimov)
Acting Head of the Department	Rasul Abakarovich Koichuev

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#### 1. Goal and objectives of the discipline study.

Goal – theoretical and practical study of Nursing Care basics to impart the students skills of providing the qualified, high-standard medical aid in their professional activities and the additional training for the successful primary accreditation, due in the sixth academic year. It is the theoretical knowledge of such key elements as asepsis, antiseptics, nursing care, preparation for various types of medical inspection and management that makes it possible to acquire the fundamental professional skills. The essessial practical skills – those from the intramuscular injection up to cardiopulmonary resuscitation – are drilled on the most up-to date training mannequins and robots. The synthesis of the accumulated knowledge gives a comprehensive understanding of the core skills, expected in MD qualification. The obtained base becomes the foundation for further study of clinical subjects and the practical application of the skills in a variety of clinical cases.

#### Objectives:

- set up medical activity under the rules of asepsis in the in-patient and out-patient departments;
- deliver medical care, transport critically sick patients;
- preparation of the patients for various types of medical inspection, pre-surgery preparation;
- preparedness to render the first medical aid in urgent cases;
- knowledge of the first principles of desmurgy;
- develop the skills of the scientific literature and official statistics review;
- form the skills of communication with patients in compliance with deontology and ethic norms, depending on the revealed pathology and patients' characterological features;
- form the skills of team work.

### 2. LIST OF THE EXPECTED LEARNING OUTCOMES.

### Competencies, formed in the course of the discipline study:

$\mathcal{N}_{\underline{0}}$	Competence	
	category	
1	General	GC-6: the ability to use the methods and means of physical education to carry out
	cultural	full-grade social and professional activity.
	competence	To know: the main data on the cardiovascular and respiratory systems parameters
		To be able to: take electrocardiogram, pulse oximetry, blood pressure, thermometry
		To possess: technique of palpation, percussion and auscultation of the cardiovascular system
2	General	GPC-8: preparedness to use medical drugs, other medical substances and their
	professional	combinations in professional work.
	competencies	To know: the main techniques of drug administration, indications and contraindications for various types of injections:  - Storage of medicines;
		<ul><li>Technique of enteral drug administration;</li><li>Technique of parenteral drug administration;</li><li>Oxygen therapy.</li></ul>
		To be able to: explain the essence of the forthcoming method of drug administration to the patient, gain informed consent for the procedure, administer injection and prepare patient for the procedure. To be able to carry out oxygen therapy.
		To possess: techniques of the intramuscular, intradermal, subcutaneous and intravenous injections.
		GPC-9: the ability to assess morphological and functional, physiological states and
		pathological processes in the human body.
		To know: the mechanisms of the cardiovascular, digestive, respiratory and urinary systems work, patterns of body allergic reactions. Clinical manifestations of the

cardiovascular, digestive, respiratory, urinary and immune systems disorders;

- the cardiovascular, digestive, respiratory, urinary systems, their role in maintaining and regulating the body homeostasis, characteristics and functional characteristics of conditions, associated with the damage to the above systems:
- allergic reaction as body's protective response to the foreign antigens, the mechanism of its development. Characteristic features of various patterns of allergic reactions;
- extent of medical aid in case of the digestive and urinary system disturbances;
- basic drugs for the emergency aid in case of the cardiovascular and immune system disturbances.

**To able to:** check patient's responsiveness, respiration, pulse rate and blood pressure **Possess:** the skill of basic CPR, probe feeding technique, cleansing and washing procedures

# 3. PLACE OF THE DISCIPLINE IN THE STRUCTURE OF THE EDUCATIONAL PROGRAM

The course «Simulation Training in Nursing Care» refers to the compulsory part of Block 1  $\rm B1.B.OД.5.$ 

"Simulation Training in Nursing Care" bases on the background knowledge, pre-formed in the course of the following subjects:

#### - Bioethics

Knowledge of: moral and ethical standards, rules and principles of professional medical conduct, patient's and the physician's rights, main ethical regulations of international and domestic professional medical associations and organizations;

Skills: create and maintain working relations with the team;

Skills: Principles of Medical Deontology and Medical Ethics

#### - Human Anatomy

Knowledge of: anatomical and physiological, age and gender-related individual characteristics of the human body structure and development.

Skills: to palpate the main bone hallmarks in a living human body, determine organs' topographic borders and the main vascular and nerve trunks;

Skills: know the concepts of medical and anatomical apparatus;

#### - Histology with Embryology

Knowledge of: the main patterns of human body development and work on the base of cell, tissue and organ structural organization; histofunctional features of tissue elements; methods of their investigation;

Skills: to analyze the histophysiological state of various cellular, tissue and organ structures;

#### - Human Physiology

Knowledge of: human body functional systems, their regulation and auto-regulation on interaction with the environment (in norm);

Skills: to interpret the results of the most common methods of laboratory and functional diagnostics, thermometry, pulse oximetry.

#### - Jurisprudence

Knowledge of: patient's and the physician's rights.

Skills: to know the current labor regulations, apply labor legislation in certain practical situations; protect the civil rights of physicians and patients of various age groups.

The discipline "Simulation training in nursing" is fundamental for the study of the following disciplines: Critical Care Medicine (anesthesiology and resuscitation), Introduction to Internal Diseases, Advanced and Intermediate Level Therapy (hospital and faculty therapy).

# IV. THE DISCIPLINE LABOR INTENSITY AND TYPES OF WORK

The total labor intensity of the subject - 3 credit units

Type of work	Hours	Semesters
	total	№ 3
Classroom-bases (total)	42	42
Including:		
Lectures (L)	8	8
Practical classes (PC)	34	34
Students' self-study (SSS)	66	66
Including:		
Preparation for practical classes	66	66
Type of the mid-course competency assessment (credit-test)	Credit-test	Credit-test
Total labor intensity:		
Hours	108	108
Credit units	3	3

### V. CONTENT OF THE DISCIPLINE

5.1 Units of the discipline and competencies, formed in the course of study

S.1 Onts of the discipline and competencies, formed in the course of stud				
№ п/п	Discipline unit	Content of the unit	Code of the competency	
1	3	4	2	
1.	Introduction to the subject.	PC.1. Introductory lesson. Familiarization of students with the Department, the curriculum, goals and objectives of the subject, standards of dress and appearance, rules of behavior. Information on textbooks and methodological literature.	GPC-9	
2.	General Issues of Infection Control	PC.2. Hospital-acquired (nosocomial) infection. Asepsis. Disinfection. Sterilization. Antiseptic. Medical hand-scrub. Use of medical gloves, mask and robe.	GC-6	
3.	The fundamentals of nursing care and transportation	PC.3. Clinical hygiene of the patient. Skin, hair, nails care of seriously sick patient. Eyes, ears and nasal cavity care. Oral care delivery. Perineum and external genital organs care in bedridden patients. Syringing (irrigation). Perineum and external genital organs care delivery in seriously sick patients. Assisting the critically sick patients with bedpan. Bed making and underwear changing. Preparation of the patient for the occupied bed making. Nurse's manipulation in occupied bed making and changing the clothes of seriously sick patient. Intrahospital transport of the patient. Reposition of bedridden patients. Transportation on stretchers. Prevention and management of bedsores.	GPC-9	
4.	Medical Nutrition Basics	PC.4. The notion of stomas. Tracheostomy. Gastrostomy care. Intestinal stoma care. Delivering care to patients with epicystostomy. Feeding the patients with intestinal stoma. Aid in rehabilitation. Patients' food hygiene. Definition of "Medical nutrition". Methods of feeding. Artificial feeding. Body mass index, definition, clinical significance.	GPC-8; GPC-9	

5.	Examination of	PC.5. Patient's preparation for laboratory and instrumental methods of	
	patient and	medical inspection. Preparation for medical check-up and blood	
	preparation for	sampling, urine, feces, and sputum draw. Draw of the pharyngeal pasal	
	various types of examinations	and nasopharyngeal content for bacteriological examination. Pinworm	GPC-9
	examinations	eggs detection. Preparation for the X-ray and endoscopic methods of medical inspection.	
6.	Fundamentals of		
0.	Physiotherapy	PC.6. Fundamentals of physiotherapy (vacuum therapy, "distracting" procedures, hirudotherapy). Oxygen therapy	GC-6;
7.	Basics of	PC.7. Desmurgy: technique of applying soft bandages	GPC-8
	desmurgy and	PC.8. Traumas. Injuries of the soft tissues. Sprains and ruptures.	
	injuries	Concussion. Compression. Closed injuries of the chest and abdominal	CDC 0
	3	organs.	GPC-8
		PC.9. Thermal (heat) injuries. Burns. Cold (freezing) injury	
8.	Basic medical	PC.10. Thermometry. Heart rate measurement. Blood pressure	
	manipulations,	measurement. ECG, the technique of performance, patient's preparation	GC-6;
	used in nursery.	for ECG procedure. Respiratory pathology. Respiratory rate	GPC-8;
		measurement.	GPC-9
9.	Urgent states	PC.11. Emergency aid in acute cardiovascular and respiratory failure.	
		Terminal state. Basic cardiopulmonary resuscitation. Features of CPR in	
		children.	GC-6;
		PC.12. Acute vascular failure. Syncope. Collapse. Heatstroke. Sunstroke.	GPC-8;
		Anaphylactic shock. Drowning. Upper airway aspiration with the foreign	GPC-9
		object (choking, obstruction).	
10	Basics of	PC.13. Probing. Gastric lavage. Duodenal intubation. Colonic (flatus)	
	cleansing	tube placement. Enemas. Medicinal enemas. Cleansing (nurgative)	GPC-8;
	procedures	enema. Laxative enemas. Siphon enema	GPC-9
		PC.14. Urinary catheterization. Catheter care. Perineum care delivery in	
4.4	7	male and female patients with urinary catheterization.	
11	Fundamentals	PC.15. Medicines in nursing practice. Administration and storage of	
	of drug	medicines. Modes of drug administration: inhalation, parenteral and	
	administration in nursing	enteral drug administration.	GPC-8;
	practice	PC.16. Parenteral drug introduction. Post-injection complications.	GPC-9
12	End-of-year	Credit-test	
	review	Cicuit-iesi	GC-6;
	20.2011		GPC-8;
			GPC-9

# 5.2. Sections of the discipline and labor intensity by type of academic work.

№ of the section	Sections	Type of work, hours.		Hours	
534 104 17 24 24 24 24 24 24 24 24 24 24 24 24 24		Classroom-based work ex		extracurricular	total
		L	PC	* SIW	
1	Introduction to the subject		2	2	4
2	General Infection Control Issues		2	4	6
3	Basics of nursing and transportation of patients		2.	2	1
4	Fundamentals of medical feeding		2.	2	1
5	Diagnostic and preparation methods	1	2	2.	
6	Physiotherapy basics		2	2	
7	Fundamentals of desmurgy and injuries	2	6	10	20
8	Essential medical manipulations in Nursing		2		20
	Care		2	6	8

9	Urgent states	2	4	6	10
10	Basics of cleansing and washing procedures	1	4	10	15
11	Fundamentals of drug administration in nursing practice	2	4	8	14
12	End-of-year review		2	12	14
Total:		8	34	66	108

5.3. Plan of the lectures

70.0	5.5.1 fan of the feetures	
<b>№</b> of	Lectures	Hours per
the		semester
section		III
1	Medical inspection of the patient. Preparation for various types of examination.	111
	Clinical blood test, capillary blood glucose test, biochemical blood test,	1
	urinalysis, stool sample. Sampling of other biological material and wound	1
	surfaces for medical examination. Preparation for endoscopic examinations. Pre-	
	surgery preparation of the patient.	
2		
2	Desmurgy: the technique of applying soft bandages.	2
	Traumas. Injuries. Sprains and ruptures. Concussions. Compression. Closed	
	injuries of the chest and abdominal organs.	
	Thermal damage. Burns. Cold injuries. First aid. Anti-shock measures.	
3	Basic cardiopulmonary resuscitation (CPR). The main manifestations of	2
	hemodynamic disorders. Drowning. Anaphylactic shock. Algorithm for first aid	_
	in emergency and urgent cases.	
4	Types of cleaning and washing procedures. Urinary system. Catheterization	1
	(types). Syringing (irrigation).	1
5	Medicines in nursing practice. Administration and storage of medicines. Routes	2
	of drug administration: external, inhalation, enteral and parenteral drug	2
	administration. Post-injection complications.	
6	Total	
U	TOTAL	8

5.4. Plan of the practical classes

№ of	Section	Topics	Assessm	nent forms	Hours per
the			Current	Final	semester
section			monitoring	monitoring	No
1.	Introduction to the subject	PC.1. Introductory lesson. Familiarization with the Department, the curriculum, goals and objectives of the subject, standards of dress and appearance, rules of behavior. Information on textbooks and methodological literature.	T, PS, CS	CQ	2
2.	General Issues of Infection Control	PC.2. Hospital-acquired (nosocomial) infection. Asepsis. Disinfection. Sterilization. Antiseptic. Medical handscrub. Use of medical gloves, mask and robe.	T, PS, CS	CQ	2
3.	The fundamentals of nursing care and transportation	PC.3. Clinical hygiene of the patient. Skin, hair, nails care of seriously sick patient. Eyes, ears and nasal cavity care. Oral care delivery. Perineum and external genital organs care in bedridden patients. Syringing (irrigation). Perineum and external genital organs care delivery in		CO	2
		Syringing (irrigation). Perineum and external genital organs care delivery in		CQ	

4.	Medical	critically sick patients. Assisting the critically sick patients with bedpan. Occupied making and underwear changing. Preparation of patient for occupied bed making. Nurse's manipulation in occupied bed making and underwear changing. Intra-hospital transport. Reposition of bedridden patients. Transportation on stretchers. Prevention and management of bedsores.  PC.4. The notion of stomas.			
	Nutrition Basics	Tracheostomy. Gastrostomy care. Intestinal stoma care. Delivering care to patients with epicystostomy. Feeding the patients with intestinal stoma. Aid in rehabilitation. Patients' food hygiene. Medical nutrition. Methods of feeding. Artificial feeding. Body mass index, definition, clinical significance.	T, PS, CS	CQ	2
5.	Examination of patient and preparation for various types of examinations	PC.5. Patient's preparation for laboratory and instrumental methods of medical inspection. Preparation for medical check-up and blood sampling, urine, feces, and sputum draw. Draw of the pharyngeal, nasal and nasopharyngeal content for bacteriological examination. Pinworm eggs detection. Preparation for the X-ray and endoscopic methods of medical inspection.	T, PS, CS	CQ	2
6.	Fundamentals of Physiotherapy	PC.6. Fundamentals of physiotherapy (vacuum therapy, "distracting" procedures, hirudotherapy). Oxygen therapy.	T, PS, CS	CQ	2
7.	Basics of desmurgy and	PC.7. Desmurgy: technique of applying soft bandages	T, PS, CS		2
	injuries	PC.8. Traumas. Injuries of the soft tissues. Sprains and ruptures. Concussion. Compression. Closed injuries of the chest and abdominal organs.		CQ	2
		PC.9. Thermal (heat) injuries. Burns. Cold (freezing) injury.	T, PS, CS		2
8.	Basic medical manipulations in nursing care.	PC.10. Thermometry. Heart rate measurement. Blood pressure measurement. ECG technique, patient's preparation for ECG procedure. Respiratory pathology. Respiratory rate measurement	T, PS, CS	CQ	2
9.	Urgent states	PC.11. Emergency aid in acute cardiovascular and respiratory failure. Terminal state. Basic cardiopulmonary resuscitation. Features of CPR in children	T, PS, CS		2
		PC.12. Acute vascular failure. Syncope. Collapse. Heatstroke. Sunstroke. Anaphylactic shock. Drowning. Upper airway aspiration with the foreign object (choking).	T, PS, CS	CQ	2

10.	Basics of	PC.13. Probing. Gastric lavage. Duodenal			2
	cleansing	intubation. Colonic (flatus) tube			
	procedures	placement. Enemas. Medicinal enemas.	T, PS, CS		
		Cleansing (purgative) enema. Laxative			
		enemas. Siphon enema		CQ	
		PC.14. Urinary catheterization. Catheter	T, PS, CS		2
		care. Perineum care delivery in male and	, ,		_
		female patients with urinary catheter.			
11.	Fundamentals of	manufacture.		CQ	2
	drug	Administration and storage of medicines.			
	administration	Modes of drug administration: external,	T, PS, CS		
	in nursing	inhalation and enteral drug administration.			
	practice	PC.16. Parenteral drug introduction. Post-	T, PS, CS		2
		injection complications.			
12.	End-of-year	PC.17. Preparation for the credit-test		CO	2
	review				
Total:					34

5.5. Educational and methodological support for self-study

5.5.1. Students' self-study (SSS)

3.0		5.5.1. Students sen-study (55	(3)	
$\mathcal{N}_{\overline{0}}$				Form of
п/п	Section	Types of SSS	Hours total	assessment
1	1	Preparation for practical classes; study of educational and scientific literature, preparation for testing	2	T
2	2	Preparation for practical classes, study of educational and scientific literature. Donning and doffing sterile medical gloves, mask and gown. Medical hand-scrub	4	Т
3	3	Preparation for practical classes; study of educational and scientific literature, preparation for testing	2	T
4	4	Preparation for practical classes, study of educational and scientific literature; preparation for testing, body mass index.	2	T
5	5	Draw of biological material for medical examination. Preparation for practical classes; study of educational and scientific literature, preparation for testing	2	Т
6	6	Preparation for practical classes; study of educational and scientific literature, preparation for testing. Cupping and distractions procedures –self-practice on family members	2	Т
7	7	Preparation for practical classes; study of educational and scientific literature, preparation for testing. Practice of bandaging on family members.	10	T
8	8	Preparation for practical classes, preparation for testing. BP, pulse and respiratory rate measurement - self-practice on family members	6	Т
9	9	Preparation for practical classes; study of educational and scientific literature, preparation for testing	6	Т
10	10	Preparation for practical classes; study of educational and scientific literature, preparation for testing	10	T
11	11	Preparation for practical classes; study of educational and scientific literature, preparation for testing. Injection techniques (intradermal, subcutaneous, intravenous and intramuscular) - self-practice on family members	8	T

12	12	Revision. Preparation for the end-of course assessment.	12	Т
Total			66	Credit-test

#### 5.5.2. Methodical instructions for students

«Methodological recommendations for the students».

# VI. ASSESSMENT DOCUMENTATION PACKAGE FOR CURRENT AND MID-TERM MONITORING ON THE RESULTS OF THE COURSE.

#### 6.1. Current monitoring

6.1.1. The list of competencies and stages of their formation in the course of study

No	Section	Code of the competency	Assessment forms
of the section	~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	under control	Assessment forms
1	2	3	4
1	Introduction to the subject	GPC-9	T, PS, CS,CQ
2	General Issues of Infection control	GC-6	T, PS, CS,CQ
3	Fundamentals of nursing care and transportation	GPC-9	T, PS, CS,CQ
4	Medical nutrition basics	GPC-8; GPC-9	T, PS, CS,CQ
5	Diagnostic and preparation methods	GPC-9	T, PS, CS,CQ
6	Physiotherapy fundamentals	GC-6; GPC-8	T, PS, CS,CQ
7	Basics of desmurgy and injuries	GPC-8	T, PS, CS,CQ
8	Main medical manipulations in nursing care	GC-6; GPC-8; GPC-9	T, PS, CS,CQ
9	Urgent states	GC-6; GPC-8; GPC-9	T, PS, CS,CQ
10	Basics of cleansing and washing procedures	GPC-8; GPC-9	T, PS, CS,CQ
11	Fundamentals of medical drug administration in nursing practice	GPC-8; GPC-9	T, PS, CS,CQ
12	Revision	GC-6; GPC-8; GPC-9	T, PS, CS,CQ

### 6.1.2. Models of assessment tools for current and midterm monitoring.

#### **CONTROL QUESTIONS**

**Topic № 10.** Thermometry. Heart rate measurement. BP measurement. ECG- patient's preparation and technique of performance. Respiratory pathology. Determination of the number of respiratory movements.

Competency code: GC-6; GPC-8; GPC-9

- 1. Definition of pulse, heart rate and respiratory rate.
- 2. Definition of bradycardia, tachycardia, bradypnea, tachypnea.
- 3. Blood pressure measurement and patient's preparation for the procedure.
- 4. Definition of systolic, diastolic and mean arterial pressure, their parameters.
- 5. What is ECG?

Assessment criteria for current monitoring (interview on control questions):

#### ✓ « Excellent»:

Student shows comprehensive knowledge of the topic under study, formulates complete and correct answers to all the questions, gives logical presentation of the material and understands the interrelations of the key terms, supplies answers to all the clarifying and extra questions. Student demonstrates knowledge of theoretical and practical material on the topic under study.

#### ✓ «Good»:

Student shows knowledge of the textbook material and the basic literature, is able to supply complete answers to all the additional and clarifying questions. Student demonstrates knowledge of theoretical and practical material on the topic under study with some minor mistakes.

#### ✓ «Satisfactory»:

Student possesses the material of practical class in the main, however, not all the clarifying and additional questions are satisfied. Student is unconfident with his task, gives incomplete answers and needs the teacher's guidance.

#### ✓ «Bad»:

Significant gaps in the essential material of the practical class, incorrect response to the clarifying and additional questions. Student is unable to give proper assessment of the case and chooses the wrong algorithm of actions. Student gets "Unsatisfactory", if he is not prepared for the lesson.

#### **TESTS**

**Topic № 2.** Nosocomial infection. Asepsis. Disinfection. Sterilization. Antiseptic. Medical handwash and scrubbing. Use of medical gloves, masks, gowns.

Codes of the competency under control: GC-6

#### 1. Sources of nosocomial infections:

- a) medical staff;
- b) bacteria carriers;
- c) patients with a suppressed or chronic form of infection;
- d) all options are correct.
- 2. The causes, leading to the host's susceptibility to infections include everything, except:
- a) unfavorable environment;
- b) age;
- c) good nutrition;
- d) the presence of long-term chronic diseases.

#### 3. The highest risk of nosocomial infections have patients of:

- a) urological departments;
- b) physiotherapy departments;
- c) therapeutic departments;
- d) polyclinics.

#### 4. Which of the following procedure is non-invasive?

- a) urinary catheterization;
- b) intramuscular injections;
- c) blood pressure measurements;
- d) surgical intervention.

#### 5. The first link of the epidemic process:

- a) a susceptible organism;
- b) transmission mechanism:
- c) source of infection;
- d) modes of transmission.

#### Criteria for assessing the current monitoring (testing):

- ✓ « Excellent »: 100-90%
- ✓ <u>«Good»:</u> 89-70%
- ✓ «Satisfactory»: 69-51%
- ✓ «Bad»: <50%

#### PRACTICAL SKILLS

#### (mannequin to practice the basic SPR skills)

**Topic11.** Emergency aid in acute cardiovascular and respiratory failures. Terminal state. Basic SPR. SPR in children.

Competency codes: GC-6, GPC-8, GPC-9

Algorithm for the complex of basic cardiopulmonary resuscitation

#### Evaluation criteria for progress monitoring

( training mannequin to drill cardiopulmonary resuscitation skills):

#### ✓ <u>«Bad»:</u>

The student fails to show practical skills of basic CPR and does not know the algorithm for performing basic CPR.

#### ✓ «Satisfactory»:

The student possesses basic skills, however makes mistakes and inaccuracies in the use of scientific terms and in practical skills. The student is basically able to independently apply the key points in the material studied. The student is able to master basic CPR skill.

#### ✓ «Good»:

The student has knowledge of the entire course, presents the material consistently, makes minor mistakes when presenting the educational material. The student does not have sufficient skills in working with reference books, textbooks, primary sources; correctly oriented, but works slowly on simulators.

#### ✓ <u>«Excellent»:</u>

The student independently points out the main issues in the studied material and is able to give a brief description of the main issues of the material under study. The student is proficient in demonstrating a set of basic CPR. The student shows profound and complete, full-scope knowledge of the course.

#### **CASE STUDIES**

**Topic 2.** Nosocomial infection. Asepsis. Disinfection. Sterilization. Antiseptic. Medical hand wash and scrubbing. Use of medical gloves, masks, gowns.

Competency code: GC-6

#### Case 1

The nurse took blood from the patient's vein for analysis. Observing all the rules of sterility, she did not put on sterile gloves and worked without gloves; having taken blood from the patient's vein, the nurse started carrying out other administrations of the physician. *Did the nurse do everything right?* 

#### Criteria for assessing case studies:

#### ✓ «Excellent»:

Student gives the correct, detailed, consistent and competent answer, with theoretical justifications (including the lecture course), with the necessary schematic pictures and demonstrations on obstetric phantoms, is correct and fluent in obstetric and gynecological terminology; answers to additional questions are correct and clear.

#### ✓ «Good»:

Student gives correct answer to the task. The explanation of the course of its solution is detailed, but not logical enough, with some errors in details and difficulties in theoretical justification (including the lecture material), in schematic images and demonstrations on

obstetric phantoms, student makes minor errors in the use of obstetric and gynecological terms; answers to additional questions are correct, but not clear enough.

#### ✓ «Satisfactory»:

Student gives correct answer. The explanation of its solution is insufficient, inconsistent, with errors, poor theoretical justification (including lecture material), with significant difficulties and errors in schematic images, demonstrations on obstetric phantoms, in the use of obstetric and gynecological terms; answers to additional questions are not clear enough, with errors in details.

#### ✓ «Bad»:

The answer to the question is incorrect. The explanation of the course of its solution is incomplete, inconsistent, with gross errors and with no theoretical justification (including lecture material); the answers to additional questions are incorrect (missing).

#### 6.2. Intermediate certification to assess the results of the course.

- **6.2.1.** Mid-term assessment credit-test. Semester-3, oral.
- **6.2.2.** The mid-term assessment procedure Objectively structured clinical testing

#### 6.2.3. Sample questions for the testing.

- 1. Indications and technique of bladder catheterization in women, contraindications.
- 2. Indications and technique of bladder catheterization in men, contraindications.
- 3. Indications and technique of Desault's bandage application.
- 4. Indications and technique of the capeline bandage application.
- 5. Indications and technique of the "Bridle" bandage application.
- 6. Indications and technique of the Hippocrates' cap bandage application.
- 7. Indications and technique of figure-of-eight (cross) bandage to the hand.
- 8. Indications and technique of dressing the shoulder joint.
- 9. Indications and technique of spica (spiral reverse) bandage on the knee.
- 10. Indications and technique of applying the convergent bandage to the hand.
- 11. Indications and technique of applying the sling (four-tailed) bandage on the nose.
- 12. Indications and technique of applying the recurrent bandage to the hand.
- 13. Indications and technique of applying the figure-of-eight (cross) bandage to the head.

#### 6.2.4. Sample examination ticket

Dagestan State Medical University
FSBEI HE DSMU under Health Ministry, RF
Department of "Medical simulation and practice"
General Medicine
Simulation training in Nursing Care

#### Examination card 12

- 1. Technique of electrocardiography.
- 2. Indications and technique for a siphon enema, contraindications.
- 3. Indications and algorithm for subcutaneous injection

1
15

### 6.2.5. The system for assessing the results of the course, the assessment scales and grading

Criteria	<b>Evaluation</b>	ı criteria
	«failed»	«passed»
	GC-6	
To know	Does not know the main parameters on the cardiovascular and respiratory systems	Knows the main parameters on the cardiovascular and respiratory systems

To be able	Is not able to take electrocardiogram, pulse	Can take electrocardiogram, pulse
	oximetry, blood pressure, temperature.	oximetry, blood pressure, temperature.
To possess	Does not know the methods of palpation, percussion and auscultation of the	Knows the methods of palpation, percussion and auscultation of the
	cardiovascular system	cardiovascular system
	GPC-8	
To know	Does not know the main modes of medical drug administration, indications and	Knows the main modes of medical drug administration, indications and
	contraindications for various types of injections	contraindications for various types of injections
To be able	Unable to explain to the patient the essence of the upcoming method of drug administration, gain informed consent for the procedure, prepare and introduce the injection. Oxygen therapy.	Can explain to the patient the essence of the upcoming method of drug administration, gain informed consent for the procedure, prepare and introduce the injection. Oxygen therapy.
To possess	Does not possess the technique for intramuscular, intradermal, subcutaneous and intravenous injections	Possesses the technique for intramuscular, intradermal, subcutaneous and intravenous injections
	GPC-9	
To know	Does not know the mechanisms of the cardiovascular, digestive, respiratory and urinary systems work, types of the body allergic reactions. Clinical manifestations of disorders of the cardiovascular, digestive, respiratory, urinary and immune systems	Knows the mechanisms of the cardiovascular, digestive, respiratory and urinary systems functioning, types of body allergic reactions. Clinical manifestations of disorders of the cardiovascular, digestive, respiratory, urinary and immune systems
To know	Unable to check the consciousness and respiration, can't take pulse and blood pressure	Can check the presence of consciousness, respiration, can take pulse and blood pressure
To possess	No skill of basic cardiopulmonary resuscitation, methods of probe feeding, cleansing and washing procedures	Possesses the skill of basic cardiopulmonary resuscitation, methods of probe feeding, cleansing and washing procedures

# VII. EDUCATIONAL, METHODOLOGICAL AND INFORMATION SUPPORT OF THE COURSE

### 7.1. Basic literature.

Paper resourses:

No	Taper resourses.	
745	Edition name	Number of available copies
1	Grebenev A.L. Basics of general nursing care. / A.L. Grebenev Moscow: Meditsina, 1991- 1999254p Text: direct. ISBN	44
	5225008860:1-50	
2	Oslopov V.N. General patient care in a therapeutic clinic: a textbook for students honey universities / V.N. Oslopov, O.V. Epiphany 3- th ed., rev. and additional Moscow: GEOTAR-Media, 2008464p. – Text: direct. ISBN 9785970-0883-4:480-00	463

F	reso	111	000.
T	resn	1111	U. 66.

$N_{\Omega}$	Edition name
1	General care of patients with a therapeutic profile: textbook. all. / edited by
1.	V.N. Oslopov, O.V. EpiphanyMoscow: GEOTAR-Media, 2017 464 p. // Student advisor: student e-library

e-library system. – Moscow, 2019. – Access mode URL:
https://www.studentlibrary.ru/book/ISBN9785970441138.html Text: electronic.

#### 7.2. Supplementary literature

#### Paper resourses:

№	Edition name	Number of available copies
1	<b>Gostishchev V.K.</b> General surgery: a textbook for students. Medical universities / V.K/ Gostishchev 4-th ed., Rev. and add Moscow: GEOTAR-Media, 2006 832 p. – Text: direct. ISBN 5970402664:480-00	94
2	Chernov V. N. Textbook for the course of general surgery: test questions, methodology for performing practical. skills, situational tasks / edited by V. N. Chernova Rostov-on-Don: Company «Book», 2003 576 p. – Text: direct. ISBN 587259237X	10
3	<b>Petrov S.V.</b> General surgery: textbook with CD for medical students / S.V/ Petrov 3-th ed., rev. and additional Moscow: GEOTAR-Media, 2005 768 p – Text: direct. ISBN 5970401048:480-00	94

#### E-resources

№	Source				
1	General surgery: textbook / V.K. Gostishchev 5th ed., Rev. and add Moscow:				
	GEOTAR-Media, 2015 728 p. // Student advisor: student e-library: e-library system. –				
	Moscow, 2019 Access mode URL:				
	http://www.studmedlib.ru/book/ISBN9785970432143.html Text: electronic.				
2	General Surgery / S.V. Petrov Moscow: GEOTAR-Media, 2010 - 768 p // Student				
	advisor: student e-library: e-library system Moscow, 2019 Access mode URL:				
	http://www.studmedlib.ru/book/ISBN9785970415726.html Text: electronic.				

# 7.3. Resources of the 'Internet' Information and Telecommunication network Websites:

No	Source:	Website:
1	"Student's Consultant" electronic library system	http://www.studmedlib.ru
2	"Doctor's Consultant" electronic library system	http://www.rosmedlib.ru
3	Health Ministry of the Russian Federation	http://minzdrav.gov.ru/
4	Infa-Med	http://www.infamed.com/
5	Electronic library of textbooks	http://studentam.het/
6	Scientific electronic library	https://www.elibrary.ru/
7	Electronic medical library	http://www.medliter.ru/
8	State Central Scientific Medical Library	http://www.scsml.ru
9	Online medical library	http://med-lib.ru/
10	Russian State Library	https://www.rsl.ru/
11	Federal Electronic Medical Library of the Health Ministry	http://www.femb.ru/feml/
		http://feml.scsml.rssi.ru/
12	Medline (PubMed, USA)	https://www.ncbi.nlm.nih.gov/pubmed/

#### 7.4 Information Technologies.

The Department makes use of general package of documents and Internet-based material, intended to improve the course of "Simulation Training in Nursing Care" and to ensure

proficiency in the educational activities. The majority of programs are known to feature the implementation of the didactic principle of visual demonstration in teaching process; thus the students can use a wide range of methods to solve the tasks. IT techniques.

The Information technology in the course of "Simulation Training in Nursing Care" comprises:

- demonstration of multimedia materials, including teaching video films;
- search systems
- fmza.ru- methodological center website for specialists' accreditation

#### List of licensed software:

- 1. WINDOWS operating system.
- 2. MS OFFICE Application package
- 3. Win HOME 10 Russian OLP (Sublicense contract Tr000044429 dated 08.12.15.)
- 4. Kaspersky Edition Security for business Standard Russian Edition. 100-149 Node (License contract № 1081-2015 dated 14.10.2015)
- 5. Office ProPlus 2013 RUS OLP NL Acdmc (contract №ДП-026 от 16.10.13г) и т.д.)

#### VIII. MATERIAL AND TECHNICAL SUPPORT

Data on physical infrastructure, required for implementation of the educational process.

N.T.	To Compare a minastructure, required for impr	
N	Type of premises with a number (classroom, laboratory,	Equipment
п/п	computer class, etc.) with the address (location) of the	
	building, clinical base, structure, the area, its purpose (for	
	independent work, for conducting practical classes, current	
	monitoring, intermediate certification, e-learning, lectures,	
	etc.)	
1	Multidisciplinary Accreditation and Simulation Center	
	(MASC) DSMU, I. Shamil ave. 44	
2	Classroom No. 1, 2, 3, 4, 5 on the ground floor, 44 I.	Phantom for intramuscular injections.
	Shamil Ave. $(200 \text{ m}^2)$	Phantom for the abdominal injections in
		diabetes. Intravenous injection simulator.
		Phantom for probing and gastric lavage.
		Phantom for urinary catheterization in male
		and female. Robot for practicing basic
		Training simulator for the Heimlich
		maneuver. Training simulator for BP
3	Lecture hall No. 1 MACTO I Chamil A. 44	measurement, desks, chairs.
)	Lecture hall No. 1 MASTS I. Shamil Ave. 44	Multimedia complex (laptop, projector,
1	$(70 \text{ m}^2)$	screen), desks, chairs
4	Lecture hall No. 2 MASTS I. Shamil Ave. 44	Multimedia complex (laptop, projector,
	$(80 m^2)$	screen), desks, chairs
5	Lecture Hall No. 3 I. Shamil Ave. 44 (500 m <sup>2</sup> )	Multimedia complex (laptop, projector,
		screen), desks, chairs
6	Residents' and Teaching Assistants' Office	PC-2; Printer Canon MF-232W
7	Head Office	PC-2; Printer Kyocera M-2235dn
8	For students' self-study (A. Aliyev st. 1, Biological Block,	Desks, chairs
	1st floor, DSMU scientific library) (65 m <sup>2</sup> )	

# IX. USE OF INNOVATIVE (ACTIVE AND INTERACTIVE) TEACHING TECHNIQUES

The active teaching methods used in the course make \_\_\_\_ 25 \_\_\_ % of the contact work .

No	$N_{\underline{0}}$ Section (list the sections with active Type, topic of the lesson with active and interactive Labor		
212	and or interactive forms (weether)	Type, topic of the lesson with active and interactive	Labor
	and / or interactive forms (methods) of	teaching methods	intensity
1	teaching)		* (hours)
1.	Basics of desmurgy and injuries	Desmurgy: practice in the technique of applying soft	1
		bandages.	
		Traumas. Injuries. Sprains and ruptures. Concussions	1
		(commotions, contusions). Compression. Closed	
		injuries of the chest and its organs. Closed injuries of	
		organs of chest and abdomen.	
		Thermal (heat) injuries. Burns. Cold (freezing) injuries.	1
2	Basic medical manipulations, used in	Thermometry. Heart rate measurement. Blood pressure	1
	nursery	measurement. Patient's preparation and ECG technique.	•
		Respiratory pathology. Respiratory rate measurement.	
3	Urgent	Emergency aid in acute cardiovascular and respiratory	1
	states	failure. Terminal state. Basic cardiopulmonary	1
		resuscitation. Features of resuscitation in children.	
		Acute vascular failure. Syncope. Collapse. Heatstroke.	
		Sunstroke. Anaphylactic shock. Drowning. Upper	
		airway aspiration with the foreign object (choking,	
		obstruction).	
4	Basics of cleaning and washing	Probing. Gastric lavage. Duodenal intubation. Colonic	1
	procedures	(flatus) tube placement. Enemas. Medicinal enemas.	
		Cleansing (purgative) enema. Laxative enemas. Siphon	
		enema.	
		Urinary catheterization. Catheter care. Perineum care	
		delivery in male and female patients with urinary	
_	T 1	catheterization.	
5	Fundamentals of drug administration in	Medicines in nursing practice. Administration and	1
	nursing practice	storage of medicines. Modes of drug administration.	
		External drug administration. Enteral drug	
		administration	
		Parenteral drug administration. Post-injection	1
		complications.	
Total			
			8

# X. METHODOLOGICAL SUPPORT. Appendix 5

# XI. ORGANIZATION OF EDUCATIONAL PROCESS FOR THE STUDENTS WITH DISABILITIES AND SPECIAL HEALTH NEEDS.

### 11.1. Education for the students with disabilities and special health needs.

If necessary, these students are provided with the adapted curriculum, special teaching methods and didactic materials, concerning their psychophysical challenges, individual capabilities and health status.

# 11.2. To ensure the curriculum study the Department is concerned in creating accessible learning environment:

- 1) students with sight impairments are provided with:
- the accessible form of information on the class schedule for the blind or visually impaired;
- assisting personnel (provision of auxiliary aid or services, staff) to render the student necessary aid;
- alternative formats of teaching materials (enlarged font or audio files);
  - 2) students with hearing impairments:
- audio reproduction of information;
  - 3) students with motion impairments
- invalid-friendly access is available in the specially equipped center with the special technical training aids (1, A. Aliyev St., Biological Block, the ground floor, DSMU Scientific Library) (in cases the disabled students can't get access to all the facilities of the Department (including classrooms, WCs etc.)
- 11.3. The educational process for students with disabilities and health challenges is carried out both with other groups of students and in individual groups.

# 11.4. The list of educational and methodological support for students' self-study.

Students with disabilities and special health needs are supplied with the adapted educational and methodological material for self-study.

Students' category	Forms	
Hearing impairment	- paper resources;	
	- e-format;	
Sight impairment	- enlarged font;	
	- e-format;	
	- audio file format;	
Motion disorder	- paper resources;	
	- e-format;	
This list and 1 1' 1 1 1'		

This list can be adjusted depending on the students' contingent.

### 11.5. Assessment documentation package for intermediate certification.

11.5.1. The list of assessment documentation package, correlated with the expected learning outcomes.

For students with disabilities and special health needs.

	Transmitted.	
Students' category	Type of the assessment	Forms of control and assessment
Hearing impairment	testing	predominantly in written form

Sight impairment	interview	predominantly oral (individually)
Motion disorder	distant testing, checklists	control in EIOS DSMU, in written

Students with disabilities and special health needs are given additional time to complete exams, they are allowed to prepare for the testing via distance learning technologies

11.5.2. Methodological materials to assess knowledge, skills and (or) experience, characterizing the stages of competencies formation.

The Department makes use of certain technological means to assess the expected learning outcomes of the disabled students.

For students with visual impairments:

- enlarged font;
- e-format;
- audio format.

For students with hearing impairments:

- paper resources;
- e-format.

For students with musculoskeletal disorders:

- paper resources;
- e-format;
- audio file.

The list can be customized depending on the students' contingent.

Assessment of the expected learning outcomes of students with disabilities special health need comply with certain additional requirements:

- 1. Assignments in an accessible form (orally, in written, orally with a sign language interpreter);
- 2. An accessible form of assessment tools (paper sources, in an enlarged font, in eformat, the assignments, read out by assistant, the assignments, rendered by sign language interpretation);
- 3. An accessible form of presentation/producing answers (in written, assistant-aided typing on keyboard, orally).

If necessary, students with disabilities and special health needs may undergo the procedure in several stages.

Expected learning outcomes of students with disabilities and special health needs may be evaluated via distance learning technologies.

#### 11.6. The list of basic and additional educational literature.

Students with disabilities and special health needs are supplied with basic and additional educational literature in the form of an electronic document in the library fund and / or in electronic library systems, as well as free special textbooks and teaching aids, other educational literature and special technical training aids for collective and individual use, as well as the services of sign language interpreters and tiflosurd interpreters.

#### 11.7. Methodical instructions for students.