

MINISTRY OF EDUCATION AND SCIENCE
KHARKIV NATIONAL MEDICAL UNIVERSITY

Department of emergency medicine, anesthesiology and intensive care

Academic year 2023-2024

SYLLABUS OF THE EDUCATIONAL COMPONENT

"Anesthesiology and intensive care"

Normative educational component

Full-time education form

Field of knowledge 22 "Health care"

Specialty 223 "Nursing"

Educational and professional program Nursing

First (bachelor) level of higher education (4 years of study)

Course 3

The syllabus was approved at the meeting
of the department of Emergency medicine,
anesthesiology and intensive care

Protocol «28» August 2023 № 13

Head of Department

(signature)

prof. Yu. Volkova
(surname and initials)

« _____ » _____ 2023

The syllabus is approved by the methodical
commission KNMU
on problems of a surgical profile

(name)

(according the order from 01.09.2020 № 241)

Protocol « 29 » August 2023 № 1

Head of the methodical commission on
problems of a surgical profile

(signature)

prof. V.O. Sypliyvi
(surname and initials)

« _____ » _____ 2023

DEVELOPERS OF THE SYLLABUS:

1. Volkova Yuliya Viktorivna - Head of the Department of Disaster Medicine and Military Medicine (from courses of emergency conditions and anesthesiology), doctor of medical sciences, professor
2. Kudinova Olha Vasylivna - professor of the department of Disaster Medicine and Military Medicine (from courses of emergency conditions and anesthesiology), candidate of medical sciences
3. Baranova Nadiia Viktorivna - associate professor of Disaster Medicine and Military Medicine (from courses of emergency conditions and anesthesiology), candidate of medical sciences

DATA ON TEACHERS TEACHING THE EDUCATIONAL COMPONENT

Surname, first name, patronymic, position, academic title, scientific degree:

1. Yuliya Viktorivna Volkova - Head of the Department of Disaster Medicine and Military Medicine (from courses of emergency conditions and anesthesiology), doctor of medical sciences, professor

Professional interests: intensive therapy of patients with polytrauma, patients in coma of various genesis, works in the resuscitation department of the KNP "Prof. O.I. Meshchaninov City Clinical Hospital for Rapid and Emergency Medical Care" KhMR

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2. Lantukhova Nataliya Dmitriivna - candidate of medical sciences - associate professor of the Department of Emergency Medicine, Anesthesiology and Intensive Care

Professional interests: intensive therapy of patients with general surgery diseases, works in the anesthesiology department of the KNP "Prof. O.I. Meshchaninov City Clinical Hospital for Rapid and Emergency Medical Care" KhMR

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Timetable: According to the schedule of the educational department

Consultations : Daily from 8am to 3pm o'clock, on Saturdays by the another teacher from 9am to 3pm o'clock.

Practical classes - classroom of the Department of Emergency Medicine, Anesthesiology and Intensive Care on the basis of KNP «City Clinical Hospital of Ambulance and Emergency Care named after Prof. A.I. Meshchaninov» (Lane Balakireva 3a), building 2, floor 4.

Class time: Monday, Tuesday, Wednesday, Thursday, Friday (according to the timetable);

Reception of tests and face-to-face consultations are conducted by teachers of the department daily from 8am to 3pm o'clock, on Saturdays by the another teacher from 9am to 3pm o'clock.

INTRODUCTION

The syllabus of the educational component "Anesthesiology and Intensive Care" is drawn up in accordance with the educational and professional program (hereinafter referred to as the "Nursing Program") "Nursing" and the Standard of Higher Education of Ukraine (hereinafter referred to as the Standard), first (bachelor's) level, field of knowledge 22 "Health Care ", specialty "Nursing".

Description of the educational component (abstract.) The educational component "Anesthesiology and Intensive Care" is intended for students of the 3rd year of education. Mastering the subject of the course is carried out in lectures, practical classes and during the independent work of the students using the distance education platform Moodle, Microsoft Teams and Google Meet. The study of the educational component will allow students to have a holistic idea of the provision of anesthesia and resuscitation support in the conditions of the operating room and intensive care unit and conditions close to critical. At the end of the classes, each student must have clear knowledge of anesthesiology and resuscitation, know the basic methods of anesthesia and intensive therapy, care for and monitor seriously ill patients.

The subject of the study of the educational component is the methods and technologies of anesthesiological support of operative interventions: theoretical foundations of general and local anesthesia, management of the perioperative period, applied pathological physiology of vital function disorders in the perioperative period and methods of their correction; emergency care and intensive care of emergency conditions.

Interdisciplinary connections:

Prerequisites: "Anesthesiology and intensive care" as an educational component:

is based on the study by students of such disciplines as human anatomy, physiology, pathomorphology and pathophysiology, microbiology, the basics of preventive medicine, the basics of psychology and interpersonal communication, pharmacology and medical prescription, etc.;

Postrequisites: Integrates with educational components such as surgical nursing, otolaryngology nursing, internal medicine nursing, pediatric nursing, infectious disease nursing, obstetrics and gynecology nursing, fundamentals of nursing, etc.

Link to the page of the educational component in MOODLE

<http://distance.knmu.edu.ua/course/view.php?id=3132>

1. PURPOSE AND OBJECTIVES of the educational component

1.1. The purpose of studying the educational component is the acquisition and deepening of knowledge, abilities, skills and other competences in anesthesiology and intensive therapy, necessary in professional activity, which are established on the basis of the educational and professional program, studying, diagnosing emergency conditions, conducting anesthesiological support, determining treatment tactics and observation of patients in the intensive care unit and intensive care unit.

1.2. The main tasks of studying the discipline are the acquisition by students of education of competencies in accordance with the general and professional competencies of the educational and professional program: to solve specialized tasks and practical problems in the field of nursing, to apply professional skills (skills), medical devices, interventions and actions to ensure the patient's dignified treatment , privacy, confidentiality, protection of his rights, physical,

psychological and spiritual needs on the basis of transcultural nursing, tolerant and non-judgmental behavior.

After studying the discipline, students should know:

- organization of the work of the anesthesiology and resuscitation department;
- effect of main anesthetics;
- stages of ether narcosis;
- types of general and local anesthesia;
- signs of clinical and biological death;
- stages of cardiopulmonary and cerebral resuscitation;
- signs of the post-resuscitation period;
- clinical signs and emergency care in case of fainting, collapse;
- clinical manifestations and emergency care for various types of shock: hemorrhagic, traumatic, anaphylactic, burn, toxic-infectious, hemotransfusion, cardiogenic;
- clinical signs and emergency care for acute heart failure: right ventricular and left ventricular;
- clinical manifestations and general methods of treatment of acute respiratory failure;
- emergency assistance for various types of drowning;
- classification of poisons, clinical signs of acute exogenous poisoning, general principles of treatment;
- clinical signs and emergency care for hypoglycemic and hyperglycemic insects;
- clinical signs and principles of intensive therapy of acute renal and acute liver failure;

1.3. Competences and learning outcomes, the formation of which is facilitated by the educational component

1.3.1. The study of the educational component ensures that students acquire the following competencies:

Integral competence	A bachelor of nursing is able to solve practical problems and tasks of activities in the field of health care using provisions, theories and methods of fundamental, medical and clinical sciences in conditions of complexity and uncertainty.
General Competences (GC)	<p>GC 01. The ability to realize one's rights and responsibilities as a member of society, to realize the values of a civil (free democratic) society and the need for its sustainable development, the rule of law, the rights and freedoms of a person and a citizen in Ukraine.</p> <p>GC 02. The ability to preserve and multiply moral, cultural, scientific values and achievements of society based on an understanding of the history and patterns of development of the subject area, its place in the general system of knowledge about nature and society and in the development of society, techniques and technologies, use different types and forms motor activity for active recreation and leading a healthy lifestyle.</p> <p>GC 03. Ability to abstract thinking, analysis and synthesis</p>

	<p>GC 04. Ability to apply knowledge in practical situations</p> <p>GC 09. Determination and persistence in relation to assigned tasks and assumed responsibilities</p> <p>GC 10. Ability to make informed decisions</p> <p>GC 11. Ability to work in a team</p> <p>GC 12. Skills of interpersonal interaction</p> <p>GC 13. Ability to act on the basis of ethical considerations</p>
<p>Professional Competences (PC)</p>	<p>PC 01. Ability to apply professional and legal standards in everyday professional practice.</p> <p>PC 02. The ability to recognize and interpret signs of health and its changes, illness or disability (assessment/diagnosis), restrictions on the possibility of full-fledged life activities, and to determine the problems of patients with various diseases and conditions.</p> <p>PC 03. The ability to meet the needs of the patient/client during various periods of life (including the dying process) by planning, assisting and implementing nursing interventions, evaluating and correcting individual care plans created in collaboration with the patient/client, caregivers, family members and other medical and social workers.</p> <p>PC 04. Application of professional skills (skills), medical means, interventions and actions to ensure the patient's dignified treatment, privacy (intimacy), confidentiality, protection of his rights, physical, psychological and spiritual needs on the basis of transcultural nursing, tolerant and non-judgmental behavior.</p> <p>PC 05. The ability to effectively apply a combination of nursing skills (skills), medical devices, interventions and actions to provide care based on a holistic (holistic) approach, taking into account the satisfaction of the patient's needs for comfort, nutrition, personal hygiene and the ability of the person to meet his daily needs.</p> <p>PC 06. The ability to effectively apply a set of professional skills (skills), medical devices, interventions and actions in assessing the functional state of patients, preparing them for diagnostic studies and taking biological material for laboratory studies.</p> <p>PC 07. Preservation of the specialist's own health when providing care, performing manipulations and procedures, when moving and transporting the patient.</p> <p>PC 08. Preventive activities of a nurse aimed at preserving and strengthening health, preventing diseases and informing and educating the patient and his family members.</p> <p>PC 13. The ability to identify the relationship between clinical manifestations of diseases and the results of additional research methods.</p> <p>PC 14. Ability to organize and provide emergency care in various acute conditions</p> <p>PC 15. Ability to organize and provide emergency assistance in peacetime and wartime emergencies.</p> <p>PC 16. Ability to organize and manage the relevant structural unit (leadership and management)</p>
<p>1.3.2. The study of the educational component ensures that students acquire the following Program Learning Outcomes(PLO):</p>	

PLO 1. Conduct nursing subjective and objective examination of various organs and systems of the patient and evaluate the obtained data.

In the conditions of health care facilities (303) and at home, by communicating with patients of different age groups, their relatives or loved ones from the environment of a sick child and his parents, be able to collect complaints, anamnesis of illness, anamnesis of life. Allergological anamnesis, epidemiological anamnesis, evaluate anamnestic data.

PLO 2. Carry out nursing diagnosis: identify and assess the patient's problems.

In the conditions of 303, at home, predictable circumstances, to be able to identify the real problems of the patient, assess their priority and establish a nursing diagnosis.

PLO 3. Plan nursing interventions.

In the conditions of health care facilities, at home and under unforeseen circumstances, be able to make a plan of nursing interventions to solve real and related problems of patients of various ages.

PLO 4. Monitor the work of junior medical staff and the state of inventory.

In terms of 303, in accordance with job duties, in order to comply with the sanitary and anti-epidemic regime, to be able to:

- conduct training of junior medical personnel on the performance of functional duties and occupational health and safety; monitor compliance with safety rules by junior medical personnel;
- monitor the work of junior medical personnel; control the implementation of the rules of the internal procedure by staff and patients; monitor compliance with measures of sanitary and hygienic regime in wards and medical offices.

PLO 5. Carry out nursing administration. In terms of 303, in order to implement organizational and management competencies, be able to: - make management decisions, ensure their implementation based on the application of nursing management models; - to ensure the implementation of orders and resolutions on health protection issues; - master the functional duties of the head of nursing services; - to know the procedure for licensing and accreditation of medical and preventive facilities, laboratories of various profiles, etc.

PLO 6. To ensure a healthy microclimate in the team. Using the principles of nursing ethics and deontology, the rules of interpersonal communication in order to create a favorable psychological microclimate, be able to:

- communicate with the patient and members of his family or close environment, medical staff;
- solve ethical and deontological problems in the process of working with the patient and his family members; consider and analyze professional mistakes in the team; conduct training for junior and technical personnel.

PLO 7. Participate in monitoring of healthy and sick population, rehabilitation and dispensary supervision

PLO 8. To perform medical manipulations in order to ensure a sanitary and anti-epidemic regime.

PLO 12. It is necessary to perform medical manipulations in order to take measures to stabilize the functional state of the body.

PLO 14. To be able to prepare the patient, collect and direct biological material for laboratory and instrumental research.

PLO 16. To provide emergency medical care based on the diagnosis of an emergency.

PLO 20. Appropriate medical documentation should be kept

1.3.3. The study of the educational component ensures the acquisition of education

the following **social skills (Soft skills)**: adaptability, communication, logical thinking, teamwork.

2. INFORMATION VOLUME of the educational component

2.1. Description of the discipline

Name of indicators	Field of knowledge, specialty, educational degree, educational professional program(EPP)	Characteristics of the educational component
		full-time education
The number of credits is 3	Field of knowledge 22 "Health care"	Normative
Total hours - 90	Specialty: 223 "Nursing"	Year of training:
		3
		Semester
		6th
Hours for full-time study: classrooms - 40 self-employed person with an education - 50	Educational degree: first (undergraduate) EPP Nursing	Lectures
		10 hours .
		Practical, seminar
		30 hours
		Laboratory
		- hours.
		Independent work
		50 hours.
Individual tasks:-		
Type of control: differential settlement		

2.2.1. Lectures of the discipline "Anesthesiology and intensive care".

№	Topic	Amount hours	Type of lecture
1	Topic 1. Cardiopulmonary and cerebral resuscitation	2	thematic
2	Topic 2. General questions of anesthesiology	2	thematic
3	Topic 5. Acute poisoning and comatose states.	2	thematic
4	Topic 7. Acute disorders of blood circulation.	2	thematic
5	Topic 8. Shock states and traumatic injuries.	2	Overview
	TOTAL HOURS	10	

2.2.2. Practical classes

№	Topic	Amount hours	Teaching methods	Control forms
1	Topic 1. Anti-epidemic measures in the conditions of COVID-19. Cardiopulmonary and cerebral resuscitation.	4	Story-explanation, conversation, lecture, demonstration, presentation, video clips, video films.	Oral survey, test control; individual tasks; abstracts; report; declamation.
2	Topic 2. General questions of anesthesiology.	2	Story-explanation, conversation, lecture, demonstration, presentation, video clips, video films.	Oral survey, test control; individual tasks; abstracts; report; declamation.
3	Topic 3. Methods of diagnosis and correction of violations of water-electrolyte exchange and acid-base status (KOS)	4	Story-explanation, conversation, lecture, demonstration, presentation, videos, video films, evaluation and interpretation of clinical, laboratory and instrumental examinations.	Oral survey, test control; individual tasks; abstracts; report; declamation. Solving clinical situational problems
4	Topic 4. Acute kidney injury (AKI) and liver failure	4	Story-explanation, conversation, lecture, demonstration, presentation, video clips, video films. Evaluation and interpretation of clinical laboratory and instrumental examinations.	Oral survey, test control; individual tasks; abstracts; report; declamation. Solving clinical situational problems
6	Topic 6. Acute respiratory failure (ARF). GDN in case of COVID-19..	2	Story-explanation, conversation, lecture, demonstration, presentation, video clips, video films. Evaluation and interpretation of clinical laboratory and instrumental examinations.	Oral survey, test control; individual tasks; abstracts; report; declamation. Solving clinical situational problems
7	Topic 7. Acute disorders of blood circulation.	4	Story-explanation, conversation, lecture, demonstration, presentation, video clips, video films.	Oral survey, test control; individual tasks; abstracts; report; declamation. Solving clinical situational problems
8	Topic 8. Shock states and traumatic injuries	4	Story-explanation, conversation, lecture,	Oral survey, test control; individual

			demonstration, presentation, video clips, video films.	tasks; abstracts; report; declamation. Solving clinical situational problems
9	Topic 9. Thermal, solar stroke. Seizure syndrome	2	Story-explanation, conversation, lecture, demonstration, presentation, video clips, video films.	Oral survey, test control; individual tasks; abstracts; report; declamation. Solving clinical situational problems
10	Differentiated credit	4		Differentiated credit
	TOTAL HOURS	30		

2.2.3. Independent work

	Amount hours	Teaching methods	Control forms
Topic 1. Cardiopulmonary and cerebral resuscitation.	4	Methodical instructions, page of the educational component in Moodle, videos	Oral survey, test control, essays, speeches on a given topic, presentations
Topic 2. General questions of anesthesiology	6	Methodical instructions, page of the educational component in Moodle, videos	Oral survey, test control, essays, speeches on a given topic, presentations
Topic 3. Methods of diagnosis and correction of violations of water-electrolyte exchange and acid-base status (ABB)	4	Methodical instructions, page of the educational component in Moodle, videos	Oral survey, test control, essays, speeches on a given topic, presentations
Topic 4. Acute kidney injury (AKI) and liver failure	6	Methodical instructions, page of the educational component in Moodle, videos	Oral survey, test control, essays, speeches on a given topic, presentations
Topic 5. Acute poisoning and comatose states.	6	Methodical instructions, page of the educational component in Moodle, videos	Oral survey, test control, essays, speeches on a given topic, presentations
Topic 6. Acute respiratory failure (ARF)	4	Methodical instructions, page of the educational component in Moodle, videos	Oral survey, test control, essays, speeches on a given topic, presentations
Topic 7. Acute disorders of blood circulation.	4	Methodical instructions, page of the educational component in Moodle, videos	Oral survey, test control, essays, speeches on a given topic, presentations
Topic 8. Shock states and traumatic injuries.	6	Methodical instructions, page of the educational	Oral survey, test control, essays, speeches on a

		component in Moodle, videos	given topic, presentations
Topic 9. Thermal, solar stroke. Seizure syndrome	4	Methodical instructions, page of the educational component in Moodle, videos	Oral survey, test control, essays, speeches on a given topic, presentations
Differentiated credit	6		
Total hours	50		

3. EVALUATION CRITERIA

3.1. Evaluation of the success of education of students under the ESTS of the organization of the educational process (different credit) is carried out on the basis of the "Instructions for evaluating the educational activity of students of KhNMU", approved by KhNMU order No. 181 dated 08/21/2021.

The Current Educational Activity of education seekers (here in after CEA) is monitored in practical classes in accordance with specific goals and during the individual work of the teacher with education seekers.

The assessment of the CEA is carried out by the teacher of the academic group, after the students have mastered each subject of the discipline, and grades are given using a 4-point (traditional) system. At the end of the semester, the teacher automatically receives the average grade (to the nearest hundredth) for the current activity using the electronic journal of the electronic system. The minimum number of points that must be obtained by a student for admission to the Diff. credit - 70 points, the minimum positive mark on the diff. credit or exam, respectively, 50 points.

Independent Work of the Acquirer (IWA). The educational material of the discipline, intended for assimilation by the student of education in the process of independent work, is submitted to the final control together with the educational material that was studied during classroom training classes.

Recalculation of the average grade for the current activity into a multi-point scale

4- point scale	200- point scale
5	120
4.95-4,99	119
4.91-4,94	118
4.87-4,9	117
4.83-4,86	116
4.79-4,82	115
4.75-4,78	114
4.7-4,74	113
4.66-4,69	112
4.62-4,65	111
4.58-4,61	110
4.54-4,57	109
4.5-4,53	108
4.45-4,49	107
4.41-4,44	106
4.37-4,4	105
4.33-4,36	104
4.29-4,32	103
4.25- 4,28	102
4.2- 4,24	101
4.16- 4,19	100
4.12- 4,15	99
4.08- 4,11	98
4.04- 4,07	97
3.99-4,03	96
3.95- 3,98	95

4- point scale	200- point scale
3.91-3,94	94
3.87-3,9	93
3.83- 3,86	92
3.79- 3,82	91
3.74-3,78	90
3.7- 3,73	89
3.66- 3,69	88
3.62- 3,65	87
3.58-3,61	86
3.54- 3,57	85
3.49- 3,53	84
3.45-3,48	83
3.41-3,44	82
3.37-3,4	81
3.33- 3,36	80
3.29-3,32	79
3.25-3,28	78
3.21-3,24	77
3.18-3,2	76
3.15- 3,17	75
3.13- 3,14	74
3.1- 3,12	73
3.07- 3,09	72
3.04-3,06	71
3.0-3,03	70
Less than 3	Недостатньо

The final semester control is conducted after the completion of the study of the discipline in the form of a differentiated assessment. Differentiated assessment (DA)(credit) is conducted by the teacher of the academic group at the last lesson in the discipline. Admission to the secondary school is determined by the points of the current educational activity, namely: min - 70, max - 120 points. Directly, DA is evaluated from -50 to -80 points.

The DA provides for the following control elements:

- 1) Solving the package of test tasks covering the discipline program includes test tasks from the database of test tasks of ITI "Step" and LII "Step-B" for the previous 5 years. The evaluation criterion is 90% of correctly solved tasks.
- 2) Tasks for the evaluation of theoretical knowledge for all subjects of the discipline, which are attached in the attached table "Evaluation of theoretical knowledge and practical skills, if they are presented in one ticket".
- 3) Evaluation of the acquisition of practical skills during differentiated assessment according to the attached tables "Criteria for scoring practical skills that are included in differentiated assessments and exams" and "Evaluation of theoretical knowledge and practical skills if they are presented in one ticket".
- 4) Tasks for practical and professional training that reflect skills and abilities during the curation of thematic patients, evaluation of the results of laboratory and instrumental methods of research

for the purpose of diagnosis and selection of treatment tactics, which are determined within the scope of the programs of educational disciplines;

5) Performing medical manipulations within the educational component program, etc.

Criteria for evaluating the results of educational activities of students of education in disciplines

Rating	Evaluation criteria
"Excellent"	the student of education shows special creative abilities, knows how to acquire knowledge independently, finds and processes the necessary information without the help of a teacher, knows how to use the acquired knowledge and skills to make decisions in non-standard situations, convincingly argues answers, independently reveals his own gifts and inclinations
"Very good"	the student is fluent in the studied amount of material, applies it in practice, freely solves exercises and problems in standard situations, independently corrects the mistakes made, the number of which is insignificant
"Good"	the learner is able to compare, generalize, and systematize information under the guidance of a teacher; in general, independently apply it in practice; control one's own activities; to correct errors, including significant ones, to select arguments to support opinions
"Satisfactory"	the student of education reproduces a significant part of the theoretical material, demonstrates knowledge and understanding of the main provisions; with the help of the teacher, he can analyze the educational material, correct errors, among which there are a significant number of significant ones
"Sufficiently"	the student of education possesses educational material at a level higher than the initial one, reproduces a significant part of it at the reproductive level
"Unsatisfactory" with the possibility of retaking the semester control	the learner possesses the material at the level of individual fragments, which constitute a small part of the educational material
"Unsatisfactory"	the learner possesses the material at the level of elementary recognition and reproduction of individual facts, elements, objects
In particular, the criteria for evaluating practical skills in disciplines	
"Excellent"	the student of education corresponds to a high (creative) level of competence: the student of education shows special creative abilities, independently demonstrates the implementation of practical skills without errors and possesses systematic theoretical knowledge (knows the methodology of performing practical skills, indications and contraindications, possible complications, etc.) and has abilities for making decisions in non-standard situations.
"Good"	the student of education independently demonstrates the implementation of practical skills, admitting some inaccuracies, which he quickly corrects, possesses theoretical knowledge (knows the methodology of performing practical skills, indications and contraindications, possible complications, etc.)

"Satisfactory"	the learner demonstrates the performance of practical skills, making some mistakes that can be corrected when corrected by the teacher, possesses satisfactory theoretical knowledge (knows the basic provisions of the methodology for performing practical skills, indications and contraindications, possible complications, etc.).
"Unsatisfactory"	the learner cannot independently demonstrate practical skills (performs them, making gross mistakes), does not have a sufficient level of theoretical knowledge (does not know the methods of performing practical skills, indications and contraindications, possible complications, etc.).

Assessment of theoretical knowledge and practical skills

Number of questions	«5»	«4»	«3»	The answer is for tickets that include the theoretical and practical parts of the discipline	For each answer, the student receives from 10 to 16 points, which corresponds to: "5" - 16 points; "4" - 13 points; "3" - 10 points.
1	16	13	10		
2	16	13	10		
3	16	13	10		
4	16	13	10		
5	16	13	10		
	80	65	50		

The grade for the discipline is the sum of points for PND and DA in points from min - 120 to max - 200 and corresponds to the traditional grade: "satisfactory", "good", "excellent"

Correspondence of discipline assessment in points to assessment in traditional assessments

Rating on a 200-point scale	Evaluation on the ECTS scale	Rating for four-point (national) scale
180–200	A	"Excellent"
160–179	B	"Good"
150–159	C	"Good"
130–149	D	"Satisfactory"
120–129	E	"Satisfactory"
less than 120	F, Fx	"Unsatisfactory"

3.2. List of questions for the differential assessment

1. Clinical death, definition, diagnosis.
2. The immediate stage of the CPR.
3. Signs of the effectiveness of resuscitation, indications for stopping resuscitation.
4. The specialized stage of the CPR.
5. Medicines used at the specialized stage of cardiopulmonary and cerebral resuscitation, their doses.

6. Ways of administering medications during resuscitation.
7. Complication of resuscitation.
8. Post-resuscitation period.
9. The concept of decortication, decerebration, brain death.
10. Classification of anesthesia types.
11. Main nodes of anesthesia apparatus.
12. Components of general anesthesia.
13. Stages of anesthesia provision.
14. Preparation of patients for surgery and anesthesia.
15. Complications during general anesthesia.
16. The role of water and electrolytes in the body. Balance method.
17. Clinical signs of dehydration and hyperhydration.
18. Pathophysiological disorders in hypo- and hyperkalemia, clinic, diagnosis, correction.
19. Concept of acidosis, correction.
20. Concept of alkalosis, correction.
21. Peculiarities of infusion therapy and correction of WEB and ABB violations in the postoperative period.
22. Peculiarities of infusion therapy and correction of WEB and ABB violations in intestinal obstruction.
23. Peculiarities of infusion therapy and correction of WEB and ABB disorders in peritonitis.
24. Causes and pathogenesis of acute Renal failure (ARF).
25. Stages of the clinical course of ARF.
26. Causes of acute liver failure.
27. Clinical manifestations of acute Liver failure. Hepatic coma.
28. Basic principles of acute poisoning IT.
29. Basic principles of forced diuresis.
30. Extracorporeal methods of detoxification, Principles of antidote therapy.
31. Features of emergency care for insect and animal bites.
32. Classification of Acute Respiratory Failure (ARF).
33. Basic principles of intensive therapy of ARF.
34. Oxygen therapy: methods, toxic effect of oxygen.
35. Ventilator, indications, methods, efficiency criteria.
36. Methods of restoring the patency of the respiratory tract and improving the drainage function of the lungs.
37. Intensive therapy of postoperative ARF.
38. Reanimation and intensive therapy for various types of drowning.
39. Types of acute circulatory disorders.
40. Pathogenesis, clinical manifestations and IT of acute heart failure
41. Pathogenesis, clinical manifestations and IT of acute heart rhythm disorders.
42. Intensive therapy for dizziness and collapse.
43. Pathogenesis, clinical course and IT of traumatic shock.
44. Pathogenesis, clinical course and IT of hemorrhagic shock.
45. Pathogenesis, clinical course and IT of burn shock
46. Pathogenesis, clinical course and IT of anaphylactic shock.
47. Pathogenesis, clinical course and IT of toxic-infectious shock.
48. Emergency care and IT for electric shock.
49. Emergency care and intensive therapy for prolonged compression syndrome.
50. Emergency care and IT for polytrauma.
51. Hyperthermic syndrome. Emergency aid.
52. Convulsive syndrome. Emergency aid.
53. Heat, sunstroke. Emergency aid.

List of practical skills of the discipline "Anesthesiology and intensive care"

1. Ensuring patency of the respiratory tract.
2. Carrying out artificial lung ventilation by the simplest methods ("mouth to mouth", "mouth to nose").
3. Carrying out indirect heart massage.
4. Preparation of the defibrillator for electrical defibrillation
5. Preparation for the work of the cardiac monitor, attachment of electrodes to the patient.
6. Carrying out oxygen therapy.
7. Measurement of CVP.
8. Calculation of the daily water balance.
9. Detoxification methods (gastric lavage, forced diuresis)
10. Assessment of the state of consciousness.
11. Preparation of a set for tracheal intubation
12. Preparation of a set for catheterization of the main vein.
13. Toilet of the tracheobronchial tree.
14. Preparation of the workplace for anesthesia.
15. Preparation of the system for intravenous infusions.
16. Counting the pulse and respiratory movements.
17. Bladder catheterization.

4. POLICY OF DISCIPLINE

In order to achieve the learning goals and successfully complete the course, it is necessary: to join the work from the first day; regularly attend lectures; read the material in advance, before considering it in a practical session.

Since February 24, 2022, the educational process has been transferred to distance mode (using distance learning technologies). The official channels of communication are mobile phones and the corporate e-mail of KhNMU, the electronic platform MOODLE, online services of video conferences Google Meet, Microsoft Teams and other possible means of communication are used in the work.

When resuming classes in the regular format - do not be late and do not miss classes; come to the department dressed in a medical gown, have a change of shoes, have a notebook, a pen with you; perform all the necessary tasks and work every day; be able to work with a partner or as part of a group; ask for help and get it when you need it. Employees of the department and students observe anti-epidemiological measures.

Academic mobility, interchangeability of credits (volume of 1 credit 30 hours) is provided. The student can discuss various tasks, but their implementation is strictly individual. Copying, use of various software tools, hints, use of a mobile phone, tablet or other electronic gadgets during class are not allowed. Students are not allowed to be late for practical classes. Absences of practical classes are made up hour by hour by the teacher of the group or the teacher on duty. Acceptance of internships and consultations are held daily from 9 a.m. to 4 p.m., on Saturdays according to the internship schedule at the ASU.

Students with special needs must meet with the teacher or notify him before the start of classes, the head of the group can do this at the request of the student.

If you have any questions, please contact the teacher.

5. ACADEMIC INTEGRITY

To form the following academic integrity skills in students:

- act in professional and educational situations from the standpoint of integrity and professional ethics
- independently perform educational tasks
- correctly refer to sources of information in case of borrowing ideas, statements, information
- to be aware of the importance of norms of academic integrity, to evaluate examples of human behavior in accordance with them
- give a moral assessment of one's own actions, compare them with moral and professional standards.

6. RECOMMENDED LITERATURE

Basic

1. Anesthesiology, intensive care and resuscitation: study guide/A.A. Ilko.- K.: "Medicine", 2018.-256 p.
2. Fundamentals of nursing / V. Kapustnyk, V. Lisovy, L. Olkhovska. - K., 2018. - 912 p. 3. Emergency conditions in clinical practice and their treatment E.Kh. Zaremba and co-authors Lviv, 1998. – 35 p.
4. Braslavets A.Ya., Dubivska S.S. Emergency neurology: training. manual - 4th ed., revised. and additional - Kh.: KhNMU, 2008. - 176 p.: illustrations. - Russian text.
5. Nursing business. Apanasenko G.L. et al., Kyiv: Health, 1994.

Auxiliary:

1. Chepkii L.P., Novytska-Usenko L.V., Tkachenko R.O. Anesthesiology and intensive care. Textbook for VMNH III-IV accreditation level. K.: Vyshcha shkola, 2003. - 399 p.
2. Guide to intensive therapy. Ed. A.I. Treshchinsky, F.S. K. Glumchera: Higher School, 2004. – 582 p.
3. Emergency medical assistance. Under the editorship F.S. Glumchera, V.F. Moskalenko K.: "Medicine" - 2006. - 632 p.
4. Emergency medical care. Handbook of a practical doctor. Ed. Z. Muller. M., 2005. – 323 p.
5. Barash J., Kullen B. Clinical anesthesiology. M., 2004. – 412 p.
6. Manual for practical classes in anesthesiology and resuscitation. Parts I and II /Edited by L.V. Usenko. - K.: Health, 1993, 1995.
7. Marino Paul L. Intensive therapy: Trans. with English / Under the editorship of A. I. Martynova. - M.: Geotar medicine, 1998. – 726 p.

7. INFORMATION RESOURCES

1. Page of the educational component in MOODLE
<http://distance.knmu.edu.ua/course/view.php?id=3132>
2. Lecture material
3. Internet, website of the department
4. Library
5. Cathedral textbooks and manuals, methodical guidelines.
6. Materials of the Ministry of Health regarding coronavirus infection.
7. Law of Ukraine "On Higher Education" dated July 1, 2014 No. 1556-VII (Article 16).
[Electronic resource] access mode http://search.ligazakon.ua/l_doc2.nsf/link1/T141556.html
8. Order of the Ministry of Education and Culture of Ukraine dated December 5, 2018. No. 1344.
"On approval of the standard of higher education in specialty 223 "Nursing" for the first (bachelor's) level of higher education." [Electronic resource] - access mode
<https://mon.gov.ua/storage/app/media/vishcha-osvita/zatverdzeni%20standarty/12/21/223-medsestrinstvo-bakalavr.pdf>
9. Order of the Ministry of Health of Ukraine dated 01.06.2013 "On approval of protocols of a nurse (paramedic, midwife) for patient care and performance of basic medical procedures and manipulations." [Electronic resource] - access mode <https://zakon.rada.gov.ua/go/v0460282-13>
10. Order of the Ministry of Health of Ukraine dated 06/05/2019 No. 1269 "On the approval and implementation of medical and technological documents on the standardization of emergency medical care". New clinical protocol "Emergency medical care: pre-hospital stage".
<https://moz.gov.ua/article/ministry-mandates/nakaz-mozukraini-vid-05062019--1269-prozatverdzhennja-ta-vprovadzhennja-mediko-tehnologichnih-dokumentiv-zistandartizaciekstrenoi-medichnoi-dopomogi>
11. Ministry of Health of Ukraine. [Electronic resource] - access mode <https://moz.gov.ua/>
12. Ministry of Health of Ukraine. Medical workers. [Electronic resource] - access mode <https://moz.gov.ua/medichnim-pracivnikam>
13. International Council of Nurses. [Electronic resource] – access mode <https://www.icn.ch/>
14. World Health Organization in Ukraine. [Electronic resource] - access mode <https://www.who.int/countries/ukr/>
16. Nursing Development Center of the Ministry of Health of Ukraine <https://nursing.org.ua/>
17. The official website of the European Resuscitation Council - <https://www.erc.edu/>
18. Testing Center <https://www.testcentr.org.ua/uk>
19. Provisions on the prevention, prevention and settlement of cases related to sexual harassment and discrimination at KhNMU http://files.knmu.edu.ua:8181/upload/redakt/doc_uchproc/polog-sex.doc
20. Provisions on the Commission on Academic Integrity, Ethics and Conflict Management of KhNMU http://files.knmu.edu.ua:8181/upload/redakt/doc_uchproc/polog_komis_ad_text.pdf

