

**Thematic plan of seminar-type classes
in discipline «Life safety»
for students of 2020 year of admission
under the educational programme
31.05.01 General medicine,
specialisation (profile) General medicine
(Specialist's degree),
form of study full-time
for the 2025-2026 academic year**

| № | Thematic blocks | Practical training within the thematic block ³ | Hours (academic) ⁴ |
|---------------------------------|---|--|--|
| 11th semester | | | |
| 1. | Fundamentals of medical and evacuation support for the population in peacetime and wartime emergencies. ¹ Principles of organizing medical and evacuation support in emergency situations. Tasks of the medical evacuation stage. Deployment scheme of the medical evacuation stage. Requirements for the deployment site of the medical evacuation stage. ² | - | 4 |
| | Medical and sanitary support for the elimination of the consequences of natural emergencies. ¹ Classification of natural emergencies. Medical and sanitary consequences of exposure to the damaging factors of geological, hydrological, meteorological natural disasters and large natural fires. Medical and sanitary support for the elimination of the consequences of natural emergencies. Long-term compression syndrome. General hypothermia and overheating of the body, frostbite. Mechanical asphyxia. Clinical picture, medical care. ² | - | 2 |
| 2. | Biological effects of ionizing radiation. Acute radiation sickness resulting from external general (total) exposure. ¹ Biological effects of ionizing radiation. Classification of radiation injuries. Acute radiation sickness resulting from external general (total) exposure: clinical manifestations, medical care. Fundamentals of medical support in the aftermath of radiation accidents. ² | - | 6 |
| 3. | Lesions resulting from internal radioactive contamination. ¹ Lesions caused by radioactive substances when they enter the body. Assessment of the damaging effect of radioactive products of nuclear explosions and accidents at nuclear power plants in the case of internal contamination. Kinetics of radionuclides in the body. Entry of radionuclides into the body. Fate of radionuclides that enter the blood. Elimination of radionuclides from the body. Prevention of lesions caused by radionuclides. Medical means of protection and early treatment. ² | - | 2 |
| | Local radiation injuries. ¹ Local radiation skin injuries. General characteristics. Dependence of the severity of radiation skin injury on the dose of external gamma radiation. Pathogenesis and main clinical manifestations of radiation skin injuries. Local radiation mucous membrane injuries. Methods of prevention and treatment of radiation skin injuries. ² | - | 2 |
| | Measures to eliminate the consequences of radiation-related emergencies. ¹ Radiation-affected areas. The concept of radioactive contamination zones. Means of radiation reconnaissance and dosimetric control. Basic measures for organizing and providing medical assistance to victims in radiation-affected areas. Medical and personal protective equipment used to prevent radiation-related injuries among the population and rescuers. Radioprotectors (main groups, mechanism of action, and methods of using radioprotectors). Special treatment. ² | - | 2 |

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| 4. | The main provisions of the toxicology of chemicals. ¹ Introduction to toxicology. The main patterns of interaction between the body and chemicals Classification of toxic chemicals. Principles of treatment at the stages of medical evacuation. The concept of a chemical hearth. ² | - | 6 |
| 5. | Toxic chemicals with neurotoxic effects. Organophosphorus compounds. ¹ Mechanisms of the toxic effects of organophosphorus compounds. Clinical picture, prevention, and general principles of medical care for organophosphorus compound poisoning. ² | - | 6 |
| 6. | Toxic chemicals with neurotoxic effects (psychodysleptics). ¹ Mechanisms of toxic effects, clinical picture, prevention, and general principles of medical care for psychodysleptic injuries. ² | - | 6 |
| 7. | Toxic chemicals with cytotoxic effects. ¹ Mechanisms of the toxic effects of mustard gas. Clinic, prevention, and general principles of providing medical care to those affected by mustard gas. Toxicological characteristics of arsenic compounds. Toxicology of toxic modifiers of plastic metabolism. Prevention of injuries, provision of medical care in the area of the incident, and at the stages of medical evacuation. ² | - | 6 |
| 8. | Toxic chemicals of the pulmonotoxic. ¹ General characteristics, mechanism of toxic action of pulmonotoxicants. Clinic of the effects of substances of pulmonotoxic action. Prevention, therapy of the effects of pulmonotoxicants at the stages of medical evacuation. ² | - | 6 |
| 9. | Toxic chemicals of general toxic effect. ¹ Classification of toxic chemicals of general toxic effect. Pathogenesis of carbon monoxide poisoning. Clinical manifestations and medical care for carbon monoxide poisoning. Toxicological characteristics of cyanides. Pathogenesis and clinical manifestations of poisoning. Prevention of poisoning and medical care in the emergency area and during medical evacuation. ² | - | 6 |
| 10. | Toxic irritant chemicals. ¹ List and classification of substances with pronounced irritant and burning effects. Toxic properties, mechanism of action, pathogenesis, and clinical manifestations of "police gas" injuries. Features of the toxic effects of natural alkylating irritant compounds. Prevention of injuries, medical care in the emergency area, and at the stages of medical evacuation. ² | - | 2 |
| | Toxic technical liquids ¹ Physical, chemical, and toxic properties of methyl alcohol, ethylene glycol, dichloroethane, trichloroethylene, tetraethyl lead, etc. Mechanisms of toxic action. Main manifestations of the toxic process. Prevention of injuries, provision of medical care in the emergency area and at the stages of medical evacuation. ² | - | 2 |
| 11. | Control of knowledge, skills, and abilities | - | 2 |
| Total | | | 60 |

¹ – тема

¹ – topic

² – essential content

³ – PT (practical training)

⁴ – one thematic block includes several classes, the duration of one class is 45 minutes, with a break between classes of at least 5 minutes

Considered at the department meeting Life safety, protocol of «30» May 2025г. № 11.

Head of the Department



A.D.Donika