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Department of Life Safety

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Life Safety

Syllabus

**For students majoring in 03.38.02 Management, 03.02.01 Mathematics and Computer Science,
03.41.04 Political Science, 03.38.01 Economics**

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Content

1. Name of the discipline...	3
2. List of planned results of mastering the educational program (list of competencies) indicating the indicators of their achievement and planned learning outcomes for the discipline ...	3
3. The place of the discipline in the structure of the educational program	6
4. The volume of the discipline (module) in credit units and in academic hours, highlighting the volume of classroom (lectures, seminars) and independent work of students...	6
5. The content of the discipline, structured by topics (sections) of the discipline, indicating their volumes (in academic hours) and types of classes	7
5.1. Content of the discipline	8
5.2. Curriculum plan	10
5.3. Contents of seminars, practical classes	15
6. List of educational and methodological support for independent work of students in the discipline	18
6.1. List of questions allocated for independent mastery of the discipline, forms of extracurricular independent work.....	18
6.2. List of questions, tasks, and topics for preparation for the current assessment.....	20
7. Fund of assessment tools for conducting midterm assessment of students in the discipline.....	36
8. List of basic and additional educational literature required for mastering the discipline	48
9. List of information and telecommunication network resources "Internet" required for mastering the discipline	56

1. Name of the discipline

" Life safety"

2. Mapping of learning outcomes (list of competences), with the relevant indicators described and subject learning outcomes indicated

For areas of training: 02.03.01 Mathematics and Computer Science

Competency Code Title	Competency Code Title	Competency Code Title	Competency Code Title
UK-8	Capable of creating and maintaining safe living conditions in everyday life and in professional activities to preserve the natural environment, ensure sustainable development of society, including in the event of a threat or occurrence of emergency situations and military conflicts	1. Identifies and resolves safety issues in the workplace, ensuring safe working conditions	Know: the basics of legislation on the occupational safety management system. Be able to: - to apply health-saving technologies in practice to ensure safety and create comfortable working conditions; - to use methods for assessing and improving performance indicators in the prevention of industrial injuries and accidents through effective management of risk factors in the workplace.
		2. Carries out measures to protect the population and territories in emergency situations and military conflicts	Know: - means and methods of collective protection of the population, material and cultural assets in emergency situations and military conflicts ; - a list of measures taken to shelter the population in civil defense protective structures (CDS); - the procedure for preparing protective structures to receive those being sheltered, as well as sheltering the population and workers in the ZSGO. To be able to: model and evaluate space-planning solutions for collective protection equipment at economic facilities .
		3. Finds ways to	Know: principles and

		resolve situations related to the safety of human life to preserve the natural environment and ensure sustainable development of society	methods of protecting the population and territories in emergency situations . Be able to: identify hazards to the human environment and assess the risk of their occurrence; solve the assigned tasks to ensure the safety of people and the environment, analyze them and draw appropriate conclusions; use basic methods to protect production personnel and the population from the possible consequences of accidents, disasters, and natural disasters.
		4. Operates in extreme and emergency situations, applying basic survival techniques in practice	Know : principles and methods of protecting the population and territories in emergency situations; a set of regulatory, organizational, engineering, technical, and other measures carried out with the aim of eliminating or reducing to an acceptable level the threat to human life and health, as well as the damage caused to affected areas during emergency situations of various natures in peacetime and wartime. Be able to : assess the situation and conditions in the event of emergency situations of natural, man-made, biological and social nature; make optimal decisions for organizing and conducting emergency rescue and other urgent work; provide first aid to the affected population.

For areas of training: 03.38.02 Management, 03.41.04 Political Science, 03.38.01 Economics

Competency Code Title	Competency Code Title	Competency Code Title	Competency Code Title
UK-7	Capable of creating and maintain safe conditions life activities for conservation of natural environment, ensuring sustainability development of society, power children using basic methods protection against possible consequences of accidents, catastrophes stanzas, natural disasters and military conflicts	1. Identifies and resolves problems, related to technical violations workplace safety, ensuring safe conditions labor	Know: Requirements of the basic legislation on the system occupational safety management Be able to: Apply health-saving techniques in practice technologies for ensuring security and creating comfortable working conditions; use techniques assessment and improvement of indicators in the prevention of industrial injuries and accidents by effective management of risk factors in the workplace place .
		2. Carries out the implementation of measures enterprises for the protection of the population and territory - rhetoric in emergency situations and military conflicts	Know: Types of collective protection equipment for the population; measures to shelter the population in protective structures defense ; the procedure for bringing protection structures in readiness to receive sheltered and shelter for the population and workers. Be able to: Model and evaluate space - plan development solutions for collective protection equipment economic objects.
		3. Finds solutions to situations, related to life safety human activities for conservation natural environment, provision	Know: Principles and methods of protecting the population and territory Thorium in emergency situations . Be able to: Identify hazards in the human environment a person, assess the risk of their implementation; solve the problems

		sustainable development of society	tasks to ensure human safety and environment , analyze them and make appropriate decisions. appropriate conclusions; use basic methods of shields for production personnel and the population from air hazards possible consequences of accidents, disasters, natural disasters disasters .
		4. Work in extreme and emergency situations, using in practice the main methods survival	Know: Principles and methods of protecting the population and territory thorium in emergency situations; a set of legal, organizational, engineering and other me - events carried out with the aim of eliminating or reducing to an acceptable level of threat to life and health of people actions , as well as damage caused to the affected territory in emergency situations of various kinds in peacetime and in wartime. Be able to: Assess the situation and the environment when an emergency arises. emergency situations of natural, man-made, biological and social nature; to take optimal measures for organizing emergency rescue and others emergency work; provide first aid to victims given to the population.

3. Place of the subject in the curriculum

The discipline "Life Safety" belongs to the "General Humanities Cycle".

4. Workload in credits and academic hours, with class work (lectures and seminars) and self-study indicated

For students majoring in 03.38.02 Management, 03.02.01 Mathematics and Computer Science, 03.41.04 Political Science, 03.38.01 Economics

Type of academic work in the discipline	Total (in wages and hours)	Semester 1, 2 (in hours)
Total labor intensity of the discipline	(2 salary) 72	(2 salary) 72
Contact work - Classroom lessons	16	16
<i>Lectures</i>	8	8
<i>Seminars, practical classes</i>	8	8
Independent work	56	56
Type of current control	Test	Test
Type of intermediate certification	Pass/Fail (Credit)	Pass/Fail (Credit)

5. Subject content (with the thematic components indicated).

5.1. Contents of the discipline

Topic 1. Life Safety as a Field of Scientific Knowledge and an Academic Discipline

Life safety as a state and basic human need. Life safety as a field of scientific knowledge. Life safety as an academic discipline: purpose, subject, tasks, basic principles. Basic concepts and definitions in the field of life safety. The "human – habitat" system. Classification and characteristics of risks and hazards in human life activities. Culture of life safety and risk-oriented thinking at the present stage of social development. The role of the human factor and artificial intelligence in ensuring life safety.

Topic 2. Security of the Individual, Society, and the State. Social Security of the Individual

Security of the individual, society, and the state: essence, concepts, and definitions. Modern challenges and threats to the security of the individual, society, and the state. Unity of contemporary problems of security of the individual, society, and state. Social security of the individual as the most important component of individual security in modern conditions. Classification and structure of threats to social security of the individual. Main directions, modern technologies, and mechanisms for ensuring social security of the individual. Information hygiene and psychological resilience.

Topic 3. Emergency Situations in Peacetime and Wartime

Emergency situations : basic concepts, classification, stages of development, damaging factors. Natural emergencies: features, characteristics, conditions and causes of occurrence. Man-made emergencies: features, characteristics, conditions and causes of occurrence. Biological-social

emergencies: features, characteristics, conditions and causes of occurrence. Emergencies caused by terrorist acts. Wartime emergencies.

Topic 4. Protection of the Population, Territories, and Economic Facilities from Emergencies

Basic concepts, principles, methods, regulatory and legal framework for protecting the population, territories, and economic facilities from emergencies. Unified State System for the Prevention and Elimination of Emergency Situations and their Consequences (RSChS). All-Russian Comprehensive System for Informing and Alerting the Population (OKSION). Civil Defense of the Russian Federation (CD): conceptual and organizational foundations of CD, CD troops, non-standard emergency rescue units, organization of CD formations, development of RSChS and CD. System of state measures for protecting the population, territories, and economic facilities from emergencies. Classification of potentially hazardous objects (PHO) and critically important objects (CIO). Increasing the resilience of economic facilities in emergency conditions: regulatory, legal, organizational, engineering, and technical factors for increasing resilience. Anti-terrorist protection of the population, territories, and economic facilities. New technologies in the field of protecting the population, territories, and economic facilities from emergencies using AI.

Topic 5. Behavior and Actions of a Person in Extreme Conditions and Emergency Situations

General procedure for human action in extreme conditions and emergency situations (during a terrorist attack, sudden building collapse, car falling into water, air transport accident, water transport accident, during a thunderstorm, fires, tsunamis, earthquakes, volcanic eruptions, activation of landslides, activation of mudflows, snow avalanches, hurricanes, tornadoes, floods, UAV attack). Factors determining behavior and choice of actions in extreme conditions and emergencies. Safe behavior models, mutual assistance, and prevention of negative consequences of extreme and emergency situations. Use of innovative technologies for survival in extreme conditions and emergencies.

Topic 6. Medico-Biological Fundamentals of Life Safety and Health Preservation

Medico-biological fundamentals of human life: influence of environmental factors on the body, adaptation mechanisms, and limits of human functional capabilities. Basic principles of health preservation, rational work and rest regime, nutrition, physical activity, and prevention of overwork. Provision of first aid and self-aid in life- and health-threatening conditions: regulatory and legal framework, basic concepts and definitions, rules, action algorithm, modern sets of means and devices for implementing first aid.

Topic 7. Labor Protection and Ensuring Occupational Safety

Labor protection in the system of ensuring occupational safety: basic concepts and definitions. Regulatory and legal framework of labor protection. Labor protection management system at an

enterprise. Personnel training on labor protection issues. Investigation of industrial accidents. Regular medical examinations of employees. Technological innovative development in the field of labor protection.

Topic 8. Environmental Safety and Protection of the Natural Environment

Modern environmental threats to human life. Basic concepts and definitions in the field of ensuring environmental safety and environmental protection. Legislative and regulatory framework for ensuring environmental safety and environmental protection. Main directions, mechanisms, methods, and technologies for ensuring environmental safety and protection of the natural environment.

Topic 9. Economic Aspects of Ensuring Life Safety

Consequences of the implementation of life safety risks for humans, nature, and the economy. Costs of measures to ensure life safety and prevent damage from emergencies. Socio-economic damage from emergencies: basic concepts, regulatory framework, types, assessment methodology, compensation mechanisms. Prevented damage. Assessment of economic efficiency of measures to ensure life safety. Economic regulation in the field of life safety: essence, mechanisms, and tools. Basic concepts , functions , tasks , and principles of risk insurance .

5.2. Educational and thematic plan

Full-time, part-time and part-time courses

No. p/p	Name of topics (sections) of the discipline	Labor intensity in hours				
		Total	Contact work - Classroom work			Independent work
			General, including :	Lectures	Seminars, practical classes	
1	2	3	4	5	6	7
1.	Topic 1. Life Safety as a Field of Scientific Knowledge and an Academic Discipline	6	- /-	- /-	- /-	6
2.	Topic 2. Security of the Individual, Society, and the State. Social Security of the Individual,	10	4	2	2	6
3.	Topic 3. Emergency Situations in Peacetime and Wartime	11	4	2	2	7
4.	Topic 4. Protection of the Population, Territories, and Economic Facilities from Emergencies	7	- /-	- /-	- /-	7

5.	Topic 5. Behavior and Actions of a Person in Extreme Conditions and Emergency Situations	9	4	2	2	5
6.	Topic 6. Medico-Biological Fundamentals of Life Safety and Health Preservation	6	- /-	- /-	- /-	6
7.	Topic 7. Labor Protection and Ensuring Occupational Safety	10	4	2	2	6
8.	Topic 8. Environmental Safety and Protection of the Natural Environment	6	- /-	- /-	- /-	6
9.	Topic 9. Economic Aspects of Ensuring Life Safety	6	- /-	- /-	- /-	6
10.	Topic 10. International cooperation in the field of life safety	5	- /-	- /-	- /-	5
	Overall for the discipline	72	16	8	8	56

5.3. Contents of seminars and practical classes

Name of topics (sections) of the discipline	List of questions for discussion at seminars, practical classes, recommended sources from sections 8,9 (section and serial number of the source are indicated)	Forms carrying out classes
Topic 1. Life Safety as a Field of Scientific Knowledge and an Academic Discipline	1. Life safety as a state and basic human need. 2. Life safety as a field of scientific knowledge. 3. Life safety as an academic discipline: purpose, subject, tasks, basic principles. 4. Basic concepts and definitions in the field of life safety. 5. The "human – habitat" system. 6. Classification and characteristics of risks and hazards in human life activities. 7. Culture of life safety and risk-oriented thinking at the present stage of societal development. 8. The role of the human factor and artificial intelligence in ensuring life safety.	Reports on topical issues followed by discussion. Business game. Development of mind maps. Scientific discussion . Case solving. Creation of interactive products based on modern technologies

Topic 2. Security of the Individual, Society, and the State. Social Security of the Individual	1. Security of the individual, society, and the state: essence, concepts, definitions. 2. Modern challenges and threats to the security of the individual, society, and state. 3. Unity of contemporary problems of security of the individual, society, and state. 4. Social security of the individual as the most important component of individual security in modern conditions. 5. Classification and structure of threats to social security of the individual. 6. Main directions, modern technologies, and mechanisms for ensuring social security of the individual. 7. Information hygiene and psychological resilience.	Reports on topical issues followed by discussion. Business game. Development of mind maps. Scientific discussion. Case solving. Creation of interactive products based on modern technologies
Topic 3. Emergency Situations in Peacetime and Wartime	1. Emergency situations : basic concepts, classification, stages of development, damaging factors. 2. Natural emergencies: features, characteristics, conditions and causes of occurrence. 3. Man-made emergencies: features, characteristics, conditions and causes of occurrence. 4. Biological-social emergencies: features, characteristics, conditions and causes of occurrence. 5. Emergencies caused by terrorist acts. 6. Wartime emergencies.	Reports on topical issues followed by discussion. Business game. Development of mind maps. Scientific discussion. Case solving. Creation of interactive products based on modern technologies
Topic 4. Protection of the Population, Territories, and Economic Facilities from Emergencies	1. Basic concepts, principles, methods, regulatory and legal framework for protecting the population, territories, and economic facilities from emergencies. 2. Unified State System for the Prevention and Elimination of Emergency Situations and their Consequences (RSChS). All-Russian Comprehensive System for Informing and Alerting the Population (OKSION). 3. Civil Defense of the Russian Federation (CD): conceptual and organizational foundations of CD, CD troops, non-standard emergency rescue units, organization of CD formations, development of RSChS and CD. 4. System of state measures for protecting the population, territories, and economic facilities from emergencies. 5. Classification of potentially hazardous objects (PHO) and critically important objects (CIO). 6. Increasing the resilience of economic facilities in emergency conditions: regulatory, legal, organizational, engineering, and technical factors for increasing resilience. 7. Anti-terrorist protection of the population, territories, and economic facilities. 8. New technologies in the field of protecting the population, territories, and economic facilities from emergencies using AI.	Reports on topical issues followed by discussion. Business game. Development of mind maps. Scientific discussion. Case solving. Creation of interactive products based on modern technologies
Topic 5. Behavior and Actions of a Person in Extreme Conditions and Emergency Situations	1. General procedure for human action in extreme conditions and emergency situations (terrorist attack, sudden building collapse, car falling into water, air transport accident, water transport accident, thunderstorm, fires, tsunamis, earthquakes, volcanic eruptions, landslides, mudflows, snow avalanches, hurricanes, tornadoes, floods, UAV attack).	Reports on topical issues followed by discussion. Business game. Development of mind maps. scientific discussion. Case solving.

	2. Factors determining behavior and choice of actions in extreme conditions and emergencies. 3. Safe behavior models, mutual assistance, and prevention of negative consequences of extreme and emergency situations. 4. Use of innovative technologies for survival in extreme conditions and emergencies.	Creation of interactive products based on modern technologies.
Topic 6. Medico-Biological Fundamentals of Life Safety and Health Preservation	1. Medico-biological fundamentals of human life: influence of environmental factors on the body, adaptation mechanisms, and limits of human functional capabilities. 2. Basic principles of health preservation, rational work and rest regime, nutrition, physical activity, and prevention of overwork. 3. Provision of first aid and self-aid in life- and health-threatening conditions: regulatory and legal framework, basic concepts and definitions, rules, action algorithm, modern sets of means and devices for implementing first aid. 4. Innovative means and equipment for providing first aid.	Reports on topical issues followed by discussion. Business game. Development of mind maps. Scientific discussion . Case solving. Creating interactive products based on modern technologies
Topic 7. Labor Protection and Ensuring Occupational Safety	1. Labor protection in the system of ensuring occupational safety: basic concepts and definitions. 2. Regulatory and legal framework of labor protection. 3. Labor protection management system at an enterprise. 4. Personnel training on labor protection issues. 5. Investigation of industrial accidents. 6. Regular medical examinations of employees. 7. Technological innovative development in the field of labor protection.	Reports on topical issues followed by discussion. Business game. Development of mind maps. Scientific discussion . Case solving. Creation of interactive products based on modern technologies
Topic 8 Environmental Safety and Protection of the Natural Environment	1. Modern environmental threats to human life. 2. Basic concepts and definitions in the field of ensuring environmental safety and environmental protection. 3. Legislative and regulatory framework for ensuring environmental safety and environmental protection. 4. Main directions, mechanisms, methods, and technologies for ensuring environmental safety and protection of the natural environment. 5. Consequences for the environment and humans of violating environmental safety. 6. Directions and methods of environmental protection from the consequences of industrial activities.	Reports on topical issues followed by discussion. Business game. Development of mind maps. Scientific discussion . Case solving. Creation of interactive products based on modern technologies
Topic 9. Economic Aspects of Ensuring Life Safety	1. Consequences of the realization of life safety risks for humans, nature, and the economy. 2. Costs of measures to ensure life safety and prevent damage from emergencies. 3. Socio-economic damage from emergencies: basic concepts, types, assessment methodology, compensation mechanisms. Prevented damage. 4. Assessment of economic efficiency of measures to ensure life safety. 5. Economic regulation in the field of life safety: essence, mechanisms, and tools. 6. Basic concepts, functions, tasks, and principles of risk insurance. 7. Prevented damage: concept and economic approaches for assessment.	Reports on topical issues followed by discussion. Business game. Development of mind maps. Scientific discussion . Case solving. Creation of interactive products based on modern technologies

6. List of teaching and methodological materials needed for the students self-study

6.1 List of questions for student self-study and types of out-of- class activities

Name of topics (sections) of the discipline	List of questions for self- study	Forms of extracurricular independent work
1	2	3
Topic 1. Life Safety as a Field of Scientific Knowledge and an Academic Discipline	1. Compare the concepts of "danger," "threat," and "risk." Provide 2 examples from everyday life for each term. 2. Describe the structure of the “human – habitat” system. What types of environments (natural, man-made , social, domestic) are included and how do they interact? 3. Why cannot Life Safety be reduced only to safety engineering? Justify the need for an interdisciplinary approach (medicine, psychology, ecology, law). 4. Analyze the axiom "there is always a non-zero risk." How does this axiom influence decision-making in daily and professional activities? 5. Draw a diagram of the evolution of hazards in human history (from primitive society to the post-industrial era). Highlight key transitions.	Studying educational literature. Preparation for a survey, scientific discussion. Preparation for interactive types of classes. Preparation and completing the test
Topic 2. Security of the Individual, Society, and the State. Social Security of the Individual	1. List the main threats to social security of the individual in a modern city. Which of them are most dangerous for young people? 2. What is information hygiene? Formulate 5 rules for protection against disinformation and manipulation on the internet. 3. How to develop psychological resilience to stressful situations related to crowd pressure or aggression? Name 4 practical techniques. 4. Name the signs of preparation for a terrorist act in places of mass gathering of people. Your actions upon discovering a suspicious object. 5. Compare the concepts of "cyberbullying," "phishing," "social engineering." Provide examples of each threat and methods of protection.	Studying educational literature. Preparation for a survey, scientific discussion. Preparation for interactive types of classes. Preparation and execution of test work.

Topic 3. Emergency Situations in Peacetime and Wartime	1. Build a classification table of emergencies by scale of distribution and speed of development. For each type, provide a real example from the last 10 years. 2. Name any three hazardous natural phenomena that can occur in your region. Describe their damaging factors and possible consequences. 3. Compare man-made emergencies with a release of hazardous chemicals and a fire in a warehouse. What are the commonalities and differences in damaging factors? 4. Why can the same emergency (eg, a flood) be classified differently? Provide 3 classification options for one event. 5. Develop a short checklist "How to recognize the approach of a natural emergency" (for any two phenomena: hurricane, earthquake, mudflow).	Studying educational literature. Preparation for a survey, scientific discussion. Preparation for interactive types of classes. Preparation and execution of test work.
Topic 4. Protection of the Population, Territories, and Economic Facilities from Emergencies	1. Name the three key federal laws of the Russian Federation in the field of protection from emergencies and briefly describe what each regulates. 2. Draw a structural diagram of the RSChS (levels: facility, local, regional, federal). Indicate which management bodies are included at each level. 3. Compare the tasks of the RSChS and the tasks of Civil Defense (CD). What is their fundamental difference? When do they intersect? 4. Why is the CD system preserved in modern Russia, despite the low probability of a full-scale war? Provide at least 3 arguments. 5. What rights and obligations of a citizen of the Russian Federation in the field of protection from emergencies are enshrined in law? Write a short memo "What I must know and do".	Studying educational literature. Preparation for a survey, scientific discussion. Preparation for interactive types of classes. Preparation and
Topic 5. Behavior and Actions of a Person in Extreme Conditions and Emergency Situations	1. What psychological and physiological reactions are most characteristic of human behavior in emergencies of various kinds, and how do they affect the ability to make decisions? 2. What are the specific features of human behavior during natural, man-made , and social emergencies, and what factors determine the differences in these reactions? 3. How does the level of training, awareness, and self-control skills influence a person's actions in an emergency situation ? 4. What mistakes in people's behavior most often occur in emergency situations , and how can they be prevented?	Studying educational literature. Preparation for a survey, scientific discussion. Preparation for interactive types of classes. Preparation and execution of test work.

	5. Why does compliance with safety rules and following the instructions of emergency services play a decisive role in preserving human life and health in an emergency situation ?	
Topic 6. Medico-Biological Fundamentals of Life Safety and Health Preservation	1. What legal aspects of first aid should an ordinary person know? (Art. 124 of the Criminal Code, Art. 125 of the Criminal Code, voluntariness, consent). 2. Universal algorithm of first aid: list the steps in the correct sequence. What to do first at the scene? 3. Compare the rules for providing first aid for arterial, venous, and capillary bleeding. For each, indicate the method of stopping and typical mistakes. 4. How to distinguish fainting from coma or clinical death? What are the actions in the absence of consciousness and breathing? 5. Create a memo "What not to do for limb fractures" (5-7 points with explanation of why not). 6. Develop an algorithm for moving a victim to a safe place, taking into account conditions under which the victim should not be moved . 7. Develop an algorithm for checking the victim for wounds or injuries. 8. How to distinguish a stroke from painful shock in a victim? What actions are needed to identify a stroke condition?	Studying educational literature. Preparation for a survey, scientific discussion. Preparation for interactive types of classes. Preparation and execution of test work.
Topic 7. Labor Protection and Ensuring Occupational Safety	1. List the main normative legal acts that make up the system of labor protection legislation in the Russian Federation (from the Constitution to instructions in the workplace). 2. Describe the structure of the labor protection management system (LPMS) at a medium-sized enterprise (100–500 people). What documents must be present? 3. What types of labor safety briefings exist and with what frequency are they conducted? What is the difference between an introductory and an initial briefing?	Studying educational literature. Preparation for a survey, scientific discussion. Preparation for interactive types of classes. Preparation and execution of test work.

	4. Describe step by step the procedure for investigating an industrial accident (minor, non-fatal). Draw up an approximate list of documents. 5. Who and how conducts a special assessment of working conditions? What classes of working conditions exist and what rights does each class give to the employee? 6. What legal aspects of first aid should an ordinary person know? (Art. 124 of the Criminal Code, Art. 125 of the Criminal Code, voluntariness, consent). 7. Methods for analyzing industrial accidents. 8. Control and supervision of labor protection at the enterprise.	
Topic 8 Environmental Safety and Protection of the Natural Environment	1. Name the three key federal laws in the field of environmental safety of the Russian Federation. What rights of citizens to a favorable environment do they enshrine? 2. Classify environmental pollution by origin, scale, and persistence. For each type, provide an example of a pollutant. 3. Compare methods of protecting the atmosphere, hydrosphere, and lithosphere from pollution. Why do the methods differ? 4. What is maximum permissible concentration (MPC) and maximum permissible emission (MPE)? What are the disadvantages of the MPC regulatory approach? 5. Analyze a situation: a factory discharges wastewater into a river. What economic and administrative mechanisms will force it to install treatment facilities? 6. Define the concept of "low-waste technologies" and provide examples of the implementation of this approach in enterprises to ensure environmental safety. 7. Define the concept of "closed production cycle" and provide examples of the implementation of this approach in enterprises to ensure environmental safety.	Studying educational literature. Preparation for a survey, scientific discussion. Preparation for interactive types of classes. Preparation and execution of test work.
Topic 9. Economic Aspects of Ensuring Life Safety	1. What is the economic essence of life safety, and how do the costs of ensuring safety correlate with the possible economic damage from emergencies, accidents, and occupational risks? 2. What types of economic losses arise from violations of life safety requirements at work, at home, and in emergencies, and how can they be assessed? 3. How is the economic efficiency of measures for labor protection, emergency prevention, and reduction of occupational risks calculated? 4. What role do insurance, state regulation, compensation payments, and socio-economic protection systems for the population play in the field of	Studying educational literature. Preparation for a survey, scientific discussion. Preparation for interactive types of classes. Preparation and execution of test work.

	life safety?5. Why are investments in preventing injury, improving working conditions, and ensuring environmental safety considered economically feasible in the long term?	
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6. 2. List of Questions, Assignments, Topics for Preparation for Current Control

1. Evolution of ideas about life safety: from instincts to scientific discipline.
2. Axiomatics of Life Safety: basic postulates, their proofs, and limits of applicability.
3. The "human – habitat" system: structure, connections, types of interaction, and efficiency criteria.
4. Danger, risk, threat: comparative analysis of concepts and their practical significance for assessing situations.
5. Interdisciplinary nature of Life Safety: connection with medicine, psychology, ecology, law, and economics (using specific examples).
6. Classification of emergency situations : review of approaches (by scale, speed of development, origin) and their critical analysis.
7. Natural emergencies typical for the territory of Russia: regional distribution, damaging factors, statistics.
8. Man-made emergencies: causes, typology, most accident-prone industries in the Russian Federation.
9. Damaging factors of emergencies of various origins: comparative table with examples and methods of protection.
10. Cascade and combined emergencies: mechanisms of occurrence, examples (Sayano-Shushenskaya HPP accident, Fukushima).
11. Monitoring of emergencies in the Russian Federation: structure, technical means, problems and development prospects.
12. Forecasting emergencies: methods (statistical, physical-mathematical, expert), accuracy and limitations on the example of earthquakes and floods.
13. Methods of protecting the population in emergencies: alerting and informing, sheltering, evacuation and dispersal, use of personal protective equipment, use of medical protective equipment – advantages and disadvantages of each.
14. Increasing the resilience of economic facilities: engineering, organizational, and technological measures.
15. Ensuring fire safety at a facility with a large number of people: requirements, typical violations, responsibility.
16. Legal basis for protecting the population from emergencies in the Russian Federation: overview of federal laws (No. 68-FZ, No. 28-FZ, No. 123-FZ, etc.).
17. Unified State System for the Prevention and Elimination of Emergency Situations (RSChS): structure, levels, tasks, modes of operation.
18. Disclose the purpose, main tasks, and structure of the All-Russian Comprehensive System for Informing and Alerting the Population (OKSION).
19. Civil Defense of the Russian Federation: purpose, tasks, forces and means, difference from RSChS .
20. Rights and obligations of citizens of the Russian Federation in the field of protection from emergencies and Civil Defense: analysis of legislative norms and implementation practices.
21. International cooperation in the field of prevention and elimination of emergencies: forms, organizations (ICDO, UN), examples of interaction.
22. Classification of working conditions: by severity, intensity, harmfulness, and danger (with examples of professions).
23. Harmful and hazardous occupational factors: systematization according to GOST 12.0.003-2015 and methods of protection against them.
24. Ergonomics and occupational safety: the influence of ergonomic characteristics of the workplace on the risk of injuries and occupational diseases.
25. Psychophysiological foundations of safety: the role of attention, memory, emotional stability, and fatigue in the occurrence of accidents.
26. Occupational risk: concept, assessment methods (individual and collective risk), occupational risk management.

27. Regulatory and legal framework of labor protection in the Russian Federation: hierarchy (Labor Code, inter-industry rules, industry standards, local acts).
28. Labor protection management system (LPMS) at an enterprise: structure, documentation, distribution of responsibilities.
29. Types of labor safety briefings: content, frequency, procedure for conducting and documentation.
30. Special assessment of working conditions (SAWC): purpose, stages, classification of working conditions, guarantees and compensations.
31. Investigation of industrial accidents: procedure, composition of the commission, preparation of materials, recording and reporting.
32. Legal aspects of providing first aid in the Russian Federation: duties, rights, responsibility, the concept of "volunteer rescuer".
33. Universal algorithm for providing first aid: step-by-step scheme (assessment of the situation, checking consciousness, breathing, calling for help, etc.).
34. First aid for bleeding: types of bleeding, methods of temporary stopping, rules for applying a tourniquet and pressure bandage.
35. First aid for musculoskeletal injuries: fractures, dislocations, sprains – immobilization and transportation.
36. First aid in the absence of consciousness and cessation of breathing/circulation: basic cardiopulmonary resuscitation (CPR) and its features.
37. Classification of threats to social security of the individual: physical, psychological, informational, economic, criminal.
38. Information hygiene: definition, threats (fakes, manipulations, cyberbullying, phishing) and methods of protection.
39. Psychological resilience of an individual in conditions of stress and emergencies: factors that reduce and increase resilience.
40. Anti-terrorist protection: rules of conduct in case of a terrorist threat, discovery of suspicious objects, hostage taking.
41. Personal safety in the urban environment and at home: prevention of fraud, attacks, domestic injuries, and poisoning.
42. Legislative support for environmental safety in the Russian Federation: federal laws (No. 7-FZ, No. 96-FZ, No. 52-FZ, etc.) and environmental rights of citizens.
43. Classification of environmental pollution: by object (atmosphere, hydrosphere, lithosphere), by origin, by persistence, by scale.
44. Air pollution: main pollutants, consequences (greenhouse effect, ozone holes, smog), and methods of protection.
45. Hydrosphere pollution: sources, types (oil, chemical, thermal, biological), treatment facilities and their effectiveness.
46. Waste management of production and consumption: classification of waste, stages of management, recycling, disposal, the problem of "garbage reform" in the Russian Federation.
47. Socio-economic damage from emergencies: structure (direct and indirect damage), assessment methods, examples of calculation for specific emergencies.
48. Risk insurance in the field of Life Safety: types (compulsory, voluntary), objects of insurance, insured events, features of insurance of hazardous facilities.
49. Economic mechanisms for ensuring environmental safety: payment for negative impact, environmental tax, "green" investments.
50. Economic efficiency of safety measures: assessment methods (prevented damage, profitability of safety, social effect).
51. The "polluter pays" principle and the introduction of best available technologies as an economic and environmental compromise.
52. The concept of "lean production". Analysis of best implementation practices at enterprises as a factor in reducing production waste.
53. The concept of "green economy". Analysis of advantages in relation to ensuring environmental safety.

6. Assessment Tools Fund for Interim Assessment of Students in the Discipline

The list of competencies indicating the indicators of their achievement in the process of mastering the educational program is contained in Section 2. "List of Planned Results of Mastering the Educational Program (List of Competencies) with Indication of Achievement Indicators and Planned Learning Outcomes for the Discipline".

Typical Control Tasks or Other Materials Necessary for Assessing Competency Achievement Indicators, Skills, and Knowledge

For areas of training: 02.03.01 Mathematics and Computer Science

Competency Code Title	Competency Code Title	Competency Code Title	Typical Control Tasks
UC-8. Able to create and maintain safe living conditions in everyday life and professional activities to preserve the natural environment, ensure sustainable development of society, including during threats and emergencies and military conflicts	1. Identifies and eliminates problems related to violations of safety rules in the workplace, ensuring safe working conditions	Know: Fundamentals of legislation on the labor protection management system . Be able to: Apply in practice health-preserving technologies to ensure safety and create comfortable working conditions; use methods for assessing and improving indicators for the prevention of occupational injuries and accidents through effective management of risk factors in the workplace.	Test 1. Within what period is the investigation of an accident that occurred with a student conducted? 1. 15 days.2. 10 days.3. 5 days.4. 3 days.Test 2. At what age can an employment contract be concluded with a minor employee? 1. From 16 years old.2. From 18 years old.3. From 14 years old.4. From 15 years old.Test 3. What type of labor safety briefing is conducted with an employee before performing work not related to their functional duties? 1. Unscheduled.2. Targeted.3. Introduction.4. Repeated. Test 4. The payment of insurance coverage for the past period is made : 1. No more than 3 years.2. No more than 2 years.3. No more than 1 year.4. No more than 4 years.Test 5. How many representatives from the employer should be on the labor protection committee (commission)?1. One.2. At least

Competency Code Title	Competency Code Title	Competency Code Title	Typical Control Tasks
			three.3. At least two.4. Determined by the manager together with the trade union committee, on a parity basis.
	2. Implements measures to protect the population and territories during emergencies and military conflicts	Know: Means and methods of collective protection of the population, material and cultural values during emergencies and military conflicts; list of measures carried out to shelter the population in protective structures of civil defense (PSCD); procedure for bringing protective structures to readiness to receive those sheltered, as well as sheltering the population and workers in PSCD. Be able to: Model and evaluate the space-planning solutions of collective protection means at economic facilities.	Assignments: The authorized representative of the organization for solving tasks in the field of Civil Defense reported to the Chairman of the Commission for the Prevention and Elimination of Emergencies and Ensuring Fire Safety (CESF) on the readiness to eliminate emergencies, the arrangement and equipment of shelters. The task of solving the issue of sheltering the population during emergencies, creating and maintaining the necessary sanitary and hygienic conditions for them is carried out by planning the premises of shelters and equipping them with the necessary life support systems. Task 1. Determine the number of places (as a percentage) for placing those sheltered in protective structures (PS) of Civil Defense lying down, with two-tier and three-tier arrangement of bunks, if the capacity of the shelter is: a) 600 people, ceiling height 2.15 m; b) 1200 people, ceiling height 2.9 m. Question 1. Can PSCD be used in peacetime? If so, for what purposes? Question 2. What are the deadlines for readiness of PSCD for operation? Question 3. List the main and auxiliary premises of PSCD. Question 4. Specify the standard indicators of volume and area for placing those sheltered

Competency Code Title	Competency Code Title	Competency Code Title	Typical Control Tasks
			(sitting, lying, height and number of bunks in PSCD). Question 5. What does the life support system include and what is its operating mode? Question 6. What is the duration of stay of those sheltered in PSCD?
	3. Finds solutions to situations related to the safety of people's lives to preserve the natural environment and ensure sustainable development of society	Know: Principles and methods of protecting the population and territories during emergencies. Be able to: Identify hazards in the human environment, assess the risk of their implementation; solve set tasks to ensure human and environmental safety, analyze them and draw appropriate conclusions; use basic methods of protecting production personnel and the population from possible consequences of accidents, catastrophes, natural disasters.	Task 1. Due to prolonged rainfall, the water in the reservoir of Ensk rose to a critical level. What actions should the Mayor of the city take in this situation to prevent an emergency? Task 2. In accordance with information received from the Central Department of Hydrometeorology and Environmental Monitoring, squally wind intensification up to 28 m/s is expected in the second half of the day. What actions (instructions) should the construction manager take at the construction sites? Task 3. As a result of an accident at an ammonia storage plant, an ammonia release into the atmosphere occurred. According to information received from the Russian Emergencies Ministry, the ammonia cloud can reach the location of the institution in 40 minutes. What are the actions of the institution's officials to protect the institution's employees from ammonia exposure?
	4. Acts in extreme and emergency situations,	Know: Principles and methods of protecting the population and territories during emergencies; a set of regulatory, legal,	Task 1. Actions of rescuers after extracting the victim : 1. Clearing the airways.2. Resuscitation (if

Competency Code Title	Competency Code Title	Competency Code Title	Typical Control Tasks
	applying basic survival methods in practice	organizational, engineering, technical and other measures carried out to eliminate or reduce to an acceptable level threats to life and health of people, as well as damage caused to affected territories during emergencies of various kinds in peacetime and wartime. Be able to: Assess the situation and conditions during emergencies of natural, man-made, biological-social nature; make optimal decisions for organizing and conducting emergency rescue and other urgent works; provide first aid to the affected population.	necessary).3. Evacuation from the zone of possible repeated avalanche.4. First aid. Formulate the procedure for performing each measure. Task 2. Methods of conducting rescue operations. Extraction from a danger zone (rockfall, avalanche zone, etc.) of victims : 1. Carrying in arms.2. Extraction by clothing.3. Extraction by legs.4. Use of a belt, loop. Describe the procedure for performing each method .

For areas of training: 03/38/02 Management, 03/41/04 Political Science, 03/38/01 Economics

Competency Code Title	Competency Code Title	Competency Code Title	Typical Control Tasks
UK-7 Capable of creating and maintain safe conditions life activities for conservation of natural environment, ensuring sustainability development of society, power	1. Identifies and resolves problems, related to technical violations workplace safety, ensuring safe conditions labor	Know: Requirements of the basic legislation on the system occupational safety management Be able to: Apply health-saving techniques in practice technologies for ensuring security and creating comfortable working conditions; use techniques	Tasks: Test 1. How long does it take to investigate an accident that occurred with students ? 1. 15 days. 2. 10 days. 3. 5 days. 4. 3 days.

children using basic methods protection against possible consequences of accidents, catastrophes stanzas, natural disasters and military conflicts		assessment and improvement of indicators in the prevention of industrial injuries and accidents by effective management of risk factors in the workplace place .	Test 2. At what age can an employment contract be concluded with a minor? worker ? 1. From the age of 16. 2. From the age of 18. 3. From the age of 14. 4. From the age of 15. Test 3. What type of occupational safety briefing is conducted with an employee before performing work not related to his functional responsibilities? 1. Unscheduled. 2. Targeted. 3. Introduction. 4. Repeated. Test 4. The assignment of insurance security for the past period is made: 1. No more than 3 years. 2. No more than 2 years. 3. No more than 1 year. 4. No more than 4 years. Test 5. How many representatives from the employer should be on the committee (commission) labor protection? 1. One. 2. At least three. 3. At least two. 4. Determined by the manager jointly with the trade union committee, on a parity basis.
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	2. Carries out the implementation of measures enterprises for the protection of the population and territory - rhetoric in emergency situations and military conflicts	Know: Types of collective protection equipment for the population; measures to shelter the population in protective structures defense ; the procedure for bringing protection structures in readiness to receive sheltered and shelter for the population and workers. Be able to: Model and evaluate space - plan development solutions for collective protection equipment economic objects.	Tasks The organization's representative authorized for solving problems in the field of civil defense reported to the chairman The Emergency Situations and Fire Safety Committee on preparedness for emergency response, construction and equipment of shelters. The solution to the problem of sheltering the population in the event of an emergency, creating and maintaining the necessary sanitary and hygienic conditions are carried out through the plan equipping the shelter premises with the necessary systems life support. Task 1. Determine the number of places (as a percentage) for placement sheltered in protective structures (PS) of civil defense lying down, with two-tier and three-tier - the arrangement of bunks, if the capacity of the shelter is: a) 600 people, ceiling height 2.15 m; b) 1200 people, ceiling height 2.9 m. Question 1. Can the Civil Defense Armed Forces be used in peacetime? If so, for what purposes? goals ? Question 2. What is the timeframe for bringing the Civil Defense Armed Forces into readiness for use? Question 3. List the main and auxiliary premises of the Civil Defense Legion.

			Question 4. Specify the standard indicators of volume and area for placing shelter - sitting, lying, height and number of bunks in the civil defense zone. Question 5. What does the life support system include and what is its operating mode? Question 6. What is the duration of stay of those sheltering in the Civil Defense Zone?
	3. Finds solutions to situations, related to life safety human activities for conservation natural environment, provision sustainable development of society	Know: Principles and methods of protecting the population and territory Thorium in emergency situations . Be able to: Identify hazards in the human environment a person, assess the risk of their implementation; solve the problems tasks to ensure human safety and environment , analyze them and make appropriate decisions. appropriate conclusions; use basic methods of shields for production personnel and the population from air hazards possible consequences of accidents, disasters, natural disasters disasters .	Task 1. As a result of prolonged precipitation, the water level in the Ensk reservoir rose to a critical level. What actions should the Mayor take in this situation? cities for emergency prevention? Task 2. In accordance with the information received from the Central UGMS, in the second Squall winds up to 28 m/s are expected in the second half of the day. What actions should I take? (instructions) must be taken by the construction manager on the sites construction ? Task 3. As a result of an accident at an ammonia storage plant, an explosion occurred. release into the atmosphere. According to information received from the Russian Ministry of Emergency Situations, tion , a cloud of ammonia can reach the location of the institution in 40

			min . What actions should officials of the institution take to protect the employees of the institution? from ammonia poisoning?
	4. Work in extreme and emergency situations, using in practice the main methods survival	Know: Principles and methods of protecting the population and territory thorium in emergency situations; a set of legal, organizational, engineering and other measures carried out with the aim of eliminating or reducing to an acceptable level of threat to life and health of people actions , as well as damage caused to the affected territory in emergency situations of various kinds in peacetime and in wartime. Be able to: Assess the situation and the environment when an emergency arises. emergency situations of natural, man-made, biological and social nature; to take optimal measures for organizing emergency rescue and others emergency work; provide first aid to victims given to the population.	Task 1. Actions of rescuers after extracting the victim: 1. Clearing the airways. 2. Resuscitation (if necessary). 3. Evacuation from the zone of a possible secondary avalanche. 4. Providing first aid. Formulate the order of execution of each activity. Task 2. Methods of conducting rescue operations. Extraction of victims from a danger zone (rockfall , avalanche, etc.): 1. Carrying in hands. 2. Extraction by clothing. 3. Extraction by the legs. 4. Using a belt, loop. Describe the order of execution of each method.

Examples of Practice-Oriented Assignments

Assignment No. 1

Reveal the classification of natural and man-made emergencies (Government Decree of the Russian Federation No. 304 dated May 21, 2007)

Nature of emergency zone	Its scale	Number of injured	Number of fatalities / injured	Amount of material damage	Environmental damage / losses

Assignment No. 2

Hazards arising during military operations or as a result of these actions

Name of Hazards	Characteristics
Hazards arising from the direct impact of means of destruction	
Hazards arising from indirect (secondary damaging factors) impact of means of destruction	
Hazards associated with changes in the human environment that can cause harm to health or death	

Assignment No. 3

Indicate the duration of clinical death when a person is exposed to electric current:

- a) 0.3 ... 0.5 min;
b) 7 ... 8 min; c) no more than 10 min; d) depends on the magnitude of the electric current affecting the person.

Assignment No. 4

Name the main filtering sorbents used in household water filters:

- a) aluminosilicates, kaolin;
b) natural zeolite, charcoal; c) activated carbon, kaolin; d) aluminosilicates, finely dispersed absorbers.

Assignment No. 5

Fill in the table "Traumatic shock":

(Table image placeholder)

Assignment No. 6

Fill in the table "Classification of industrial accidents"

Assignment No. 7

Illustrate and fill in the relationship of the considered concepts with the following conditional example of a mixed, socio-natural-man-made threat.

Sources of damaging factors	Accumulation of hazards and occurrence of emergencies
Heat, drought, influx of vacationers to forests:	
Campfires of vacationers in the forest, wind:	
Ignition of grass and trees (in places):	
A forest fire that cannot be extinguished locally in a short time:	
Spread of fire and real threat of death of people and property, transport, energy, and communication systems:	
Death of buildings and people, danger of expanding the scale of these losses to neighboring territories:	

Example of a Practice-Oriented (Situational) Task, Case

Shelters. Classification of Civil Defense shelters. Premises for the main purpose. Use of Civil Defense protective structures abroad. Examples of using Civil Defense protective structures in wartime.

Example answer.

Shelter – PSCD, providing, within the standard time, protection of those sheltered from the calculated impact of damaging factors of nuclear weapons and conventional means of destruction, bacteriological (biological) agents, combat toxic chemicals, and, if necessary, from hazardous chemicals, radioactive substances during the destruction of nuclear installations, storage points for nuclear materials, radioactive substances and radioactive waste, high temperatures and combustion products during fires.

In accordance with GOST R 42.4.03-2015 "Civil Defense. Protective structures of civil defense. Classification. General technical requirements", CD shelters are classified by:

- protection against means of destruction;
- protection against external radioactive radiation;
- duration of operation;
- capacity ;
- vertical placement;
- location ;

construction time;

number of stores .

By protection against means of destruction , shelters are subdivided into:

located in adapted premises of industrial, auxiliary, residential and public buildings and other facilities, as well as free-standing (buried or elevated), must provide protection from excess pressure in the front of the shock wave equal to 500 kPa (5 kgf /cm²); 300 kPa (3 kgf /cm²); 200 kPa (2 kgf /cm²); 100 kPa (1 kgf /cm²); 50 kPa (0.5 kgf /cm²);

shelters located in deep underground metro structures must provide protection from excess pressure in the front of the shock wave equal to 300 kPa (3 kgf /cm²);

shelters located within the design boundaries of NPP construction must provide protection from excess pressure in the front of the shock wave equal to 200 kPa (2 kgf /cm²);

shelters located in zones of possible severe destruction and continuing their activities in wartime, as well as within the design boundaries of NPP construction, within their zone of possible severe destruction, and in shallow metro structures, must provide protection from excess pressure in the shock wave front equal to 100 kPa (1 kgf /cm²);

shelters located at facilities classified as CD categories and in cities classified as the group of special importance for CD must provide protection against the high explosive effect of conventional means of destruction, damage from debris of building structures and collapse of structures of overlying floors of buildings of various storeys .

By protection against external radioactive radiation , shelters are subdivided into:

those located in adapted premises of industrial, auxiliary, residential and public buildings and other facilities, as well as free-standing (buried or elevated), with a degree of attenuation equal to 5000; 3000; 2000; 1000;

those located within the design boundaries of NPP construction, with a degree of attenuation equal to 5000;

those located in deep underground metro structures, with a degree of attenuation equal to 3000;

those intended for non-transportable patients in healthcare institutions located in cities classified as the special importance group for CD, as well as their attending medical personnel, as well as shelters located in zones of possible severe destruction and continuing their activities in wartime and shallow metro structures, with a degree of attenuation equal to 1000.

By duration of operation , CD shelters are subdivided into:

shelters located within the design boundaries of NPP construction (must ensure operation for five days);

all other shelters must ensure operation for two days.

By capacity , shelters are classified as follows:

small capacity – up to 150 people;

medium capacity – 150-600 people;

large capacity – more than 600 people.

By vertical placement , shelters are subdivided into:

underground for deep metro structures;

(the elevation of the structure's covering is at or below the planning ground level buried);

semi-buried (the elevation of the structure's floor level is at least 1.5 m below the planning ground level);

elevated (the elevation of the structure's floor level ranges from 0 to 1.5 m from the planning ground level).

By location , shelters are subdivided into:

free-standing , located on unbuilt plots;

built-in , located in basements, semi-basements (ground floors) and first floors of buildings.

By construction time , shelters are subdivided into:

pre-built ;

quick-erected .

By number of storeys , CD shelters are subdivided into :

single- storey ;

multi- storey .

In accordance with SP 88.13330.2022 "Protective structures of civil defense. Updated version of SNiP II-11-77", shelters provide main premises. These include:

premises for those sheltered;

control points;

sanitary post (point).

The floor area of the main premises per person sheltered should be 0.6 m² with single-tier, 0.5 m² with two-tier, and 0.4 m² with three-tier arrangement of bunks. The internal volume of the room should be at least 1.5 m³ per person sheltered.

Examples of Questions for Preparation for Interim Assessment

1. What is understood by life safety as a state of human protection?
2. Why is life safety considered a basic human need?
3. What are the object, subject, and research methods of life safety as a field of scientific knowledge?
4. What is the purpose of studying the discipline "Life Safety"?
5. What are the main tasks of the academic discipline "Life Safety"?
6. What basic concepts and definitions are used in the field of life safety?
7. What is the “human – habitat” system?
8. What elements does the “human – habitat” system include and what are the features of their interaction?
9. What is a hazard and how does it differ from risk?
10. What classifications of risks in human life activities exist?
11. What types of hazards are identified by origin, nature of impact, and scale of consequences?

12. What is the essence of risk-oriented thinking in modern society?
13. What is understood by a culture of life safety?
14. What is the role of the human factor in ensuring life safety?
15. How is artificial intelligence used in life safety systems?
16. What are the advantages and limitations of using artificial intelligence in the field of safety?
17. What is understood by the security of the individual, society, and the state?
18. How do the concepts of "individual security", "public security", and "state security" relate?
19. What modern challenges and threats are characteristic of individual security?
20. What modern challenges and threats are characteristic of the security of society and the state?
21. How does the unity of contemporary problems of security of the individual, society, and state manifest?
22. What is understood by social security of the individual?
23. Why is social security of the individual considered the most important component of overall individual security?
24. What threats relate to threats to social security of the individual?
25. How can the classification of threats to social security of the individual be presented ?
26. What is the structure of threats to social security of the individual in modern conditions?
27. What are the main directions for ensuring social security of the individual in modern society?
28. What modern technologies and mechanisms are used to ensure social security of the individual?
29. What is understood by information hygiene of the individual?
30. What is the role of information hygiene in preventing social and psychological threats?
31. What is psychological resilience of an individual and how does it affect security?
32. What methods of developing psychological resilience can be used in conditions of increasing threats?
33. What is understood by an emergency situation ?
34. What basic signs and criteria of an emergency situation are used in regulatory documents?
35. How are emergencies classified by origin and scale?
36. What stages of emergency development are distinguished in the theory and practice of Life Safety?
37. What is understood by damaging factors of an emergency situation ?
38. Which emergencies are classified as natural?
39. What are the main causes and conditions for the occurrence of natural emergencies?
40. What damaging factors are characteristic of natural emergencies?
41. What are man-made emergencies?
42. What are the main causes and conditions for the occurrence of man-made emergencies?
43. What damaging factors are characteristic of man-made emergencies?
44. What is understood by biological-social emergencies?
45. What are the features, causes, and consequences of biological-social emergencies?
46. What emergencies can be caused by terrorist acts?
47. What are the features of emergencies caused by terrorist acts?
48. What is understood by wartime emergencies?
49. What are the features of damaging factors of wartime emergencies?
50. What are the differences between peacetime emergencies and wartime emergencies?
51. What are the basic principles of protecting the population, territories, and economic facilities from emergencies?
52. What methods of protecting the population and territories from emergencies are used

in the Russian Federation?

53. What are the regulatory and legal foundations for protecting the population, territories, and economic facilities from emergencies?

54. What is the Unified State System for the Prevention and Elimination of Emergency Situations (RSChS)?

55. What are the main tasks and functions of the RSChS ?

56. What is the structure of the RSChS and how is its functioning organized?

57. What is understood by the Civil Defense of the Russian Federation?

58. What are the main tasks of civil defense in modern conditions?

59. What are the organizational foundations of civil defense in the Russian Federation?

60. What is OKSION and what are its main functions in the system of protecting the population and territories from emergencies?

61. What does the system of state measures for protecting the population, territories, and economic facilities from emergencies include?

62. Which objects are classified as potentially hazardous objects (PHO) and critically important objects (CIO)?

63. Anti-terrorist protection of the population, territories, and economic facilities.

64. Describe the main methods of protecting the population in emergencies.

65. What is understood by the resilience of economic facilities in emergency conditions?

66. What regulatory, legal, organizational, and engineering-technical measures ensure increased resilience of economic facilities?

67. What new technologies are used in the field of protecting the population, territories, and economic facilities from emergencies?

68. What are the possibilities of using artificial intelligence in preventing and responding to emergencies?

69. What is the general procedure for human actions during an extreme situation or emergency?

70. What factors determine human behavior in extreme conditions?

71. How does psychological state influence the choice of actions in an emergency?

72. What are the basic rules of safe behavior during a terrorist attack?

73. How to act during a sudden building collapse?

74. What are the rules of behavior when a car falls into water?

75. How to act during an air transport accident?

76. What are the basic rules of behavior during a water transport accident?

77. What safety measures should be observed during a thunderstorm?

78. What is the procedure for human actions during a fire indoors and in open areas?

79. How to act during a tsunami threat and occurrence?

80. What are the rules of behavior during an earthquake?

81. How to act during a volcanic eruption?

82. What safety measures should be observed during landslides?

83. What are the rules of behavior during mudflows?

84. How to act during a snow avalanche?

85. What are the rules of safe behavior during a hurricane and tornado?

86. How to act during a flood?

87. What is understood by safe behavior models in extreme and emergency situations ?

88. What is the role of mutual assistance and self-control in preventing negative consequences of emergencies?

89. What innovative technologies can be used for survival in extreme conditions and emergencies?

90. What are the medical-biological foundations of human life and the safety of its existence?

91. How do environmental factors affect the human body?

92. What are the mechanisms of adaptation of the human body to environmental conditions?

93. What are the limits of human functional capabilities in extreme conditions?
94. What are the basic principles of health preservation?
95. How does a rational work and rest regime affect human life safety?
96. What is the importance of rational nutrition and physical activity for the prevention of overwork and health maintenance?
97. What are the regulatory and legal foundations for providing first aid and self-aid?
98. What is the general algorithm for providing first aid in life- and health-threatening conditions?
99. What are the economic aspects of ensuring life safety: types of damage, costs of preventive measures, economic efficiency of measures, and the role of risk insurance?
100. What are the main provisions of the Methodology for Assessing Damage from Emergencies?

7. Methodological Guidelines for Students on Mastering the Discipline

When preparing, students should use regulatory legal acts and governing documents of the Financial University, Methodological Recommendations for planning and organizing extracurricular independent work of students in bachelor's and master's degree programs at the Financial University, approved by Order of the Financial University No. 1040 dated May 11, 2021 (see the Financial University website: main page section "Our University"; then "Unified Legal Base of the Financial University"), use the methodological recommendations of the Department of "Life Safety".

Independent work of students takes place outside the classroom. The educational-thematic plan for studying the discipline serves to organize independent work. This plan indicates the topics of lectures, seminars, as well as questions and assignments for independent study.

During lectures, it is necessary to take notes on the content of the lecture. After the lecture, it is necessary to edit the notes, format the notes, supplementing their content with additional information. When writing notes, it is advisable to highlight the titles of topics and formulations of questions, basic definitions, and examples.

When preparing for a seminar, it is necessary to study the seminar questions and the relevant theoretical material, making necessary notes in a workbook. After classes, it is necessary to review the material taken down and fill in any gaps in the lecture notes. If difficulties arise in solving practical issues (tasks), you can seek advice (help) from the teacher.

Seminars are usually held in an interactive form, and the teacher takes into account the activity of students aimed at solving the proposed questions (task options), as well as answer options to the questions (problems) being solved. Do not be afraid of giving an incorrect answer or making another mistake: correcting and analyzing mistakes during communication with the teacher and fellow students during the seminar contributes to a deeper assimilation of the educational material and prevents errors in the future.

Homework (preparation for classes) should be done regularly. If a particular task, while preparing for a seminar, causes difficulty, it is necessary to consult the teacher. Regularity in doing homework (preparing for classes) is an important factor in the high-quality mastering of the discipline.