FEDERAL STATE BUDGETARY
EDUCATIONAL INSTITUTION OF HIGHER EDUCATION
«AMUR STATE MEDICAL ACADEMY»
MINISTRY OF HEALTH OF THE RUSSIAN FEDERATION

AGREED
Vice-Rector for Academic Affairs,

_____N.V. Loskutova

April 17, 2025

Decision of the CCMC
April 17, 2025

Protocol No. 7

APPROVED
by decision of the Academic Council of the FSBEI HE Amur SMA of the Ministry of Health of the Russian Federation
April 22, 2025

Protocol No. 15

Acting Rector of the FSBEI HE Amur SMA of the Ministry of Health of the Russian Federation

_____I.V. Zhukovets

April 22, 2025

ДОКУМЕНТ ПОДПИСАН
ЭЛЕКТРОННОЙ ПОДПИСЬЮ

Сертификат: 50AB2242604E64520B52614FA420034A
Владелец: Жуковец Ирина Валентиновна
Действителен: с 15.04.2025 до 09.07.2026

EDUCATIONAL PROGRAM

disciplines «Higiene»

Specialty: 31.05.01 General Medicine
Course: 2,3
Semester: 4,5
Total hours: 216 hrs.
Total credits: 6 credit units
Control form – credit-test, 5 semester

Blagoveshchensk, 2025

The educational program of the discipline is designed in accordance with the requirements of the Federal State Educational Standard of Higher Education - specialist in specialty 31.05.01 General Medicine, approved by order of the Ministry of Education and Science of Russia dated 08/12/2020 No. 988 (registered with the Ministry of Justice of Russia on 08/26/2020 No. 59493), BPEP HE (2021).

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Approved at the Meeting of the Department of General Hygiene:
Protocol No. 10 dated 14.05.2021

Head of the Department, D.M., N.V. Korshunova

Conclusion of the Expert Commission on the Review of the Working Program:

Protocol No. 2 dated 17.05.2021

Expert of the Expert Commission:

K.T.H. N.V. Korshunova

Approved at the Meeting of the CMC No. 5: Protocol No. 8 dated 14.05.2021

Chairman of the CMC No. 5:

D.M., Professor N.V. Korshunova

Agreed: Dean of the Medical Faculty, D.M., Docent I.V. Zhukovets

Date:
"20" May 2021

CONTENT

1. EXPLANATORY NOTE

1. Characteristics of the discipline

Hygiene, in its theoretical content, is a science about preventive measures of the impact of the environment on the healthy human body. It is the main preventive discipline whose primary task is to form a preventive mindset in students.

In its applied content, hygiene is a science about the principles and rules of effective, reliable, and safe prevention.

Hygiene is significant for the healthcare system, including therapy, practical medicine, pharmacology, etc. It contributes to the success of biology in understanding the patterns of interaction between positive and negative natural factors on any plant and animal organisms. It provides information to medical and biological sciences, which can be used for the prevention of various diseases and ecological stress on the human body.

In this regard, hygiene is a science closely related to ecology and biological and physiological aspects of the existence of the organism. It is impossible to imagine practical medicine without hygienic science. Achievements in hygiene inevitably affect the development of healthcare. Preventive work is an integral part of the activities of a practicing physician, whose responsibilities include organizing medical care for the population in various groups.

Due to the great significance of hygiene as a science for practical medicine, knowledge of hygiene is absolutely necessary for any physician. This has become especially important because most modern hygienic developments have very high significance, and inaccuracies in their implementation can lead to adverse effects and harm the patient's health.

The traditional and main content of hygiene is the hygienic understanding of environmental factors, i.e., the study of various aspects of their interaction with the organism. A very important section of hygiene is general hygiene, which determines the prophylactic preventive work of a practicing physician. The practical part of hygiene is successfully studied by physiology, pathophysiology, therapy, infectious diseases, etc. However, the interpretation of the obtained data on prevention requires discussion using hygienic methodology of thinking.

1.2. Goal and objectives of the discipline.

The goal of teaching the discipline:

Study of the influence of environmental factors that have a positive or negative impact on the organism. The ability to competently and comprehensively assess the interaction between the organism and the environment, taking into account the degree of this interaction. Study and implementation of specific preventive measures aimed at improving the external environment and strengthening the health of the population.

Educational objectives of the discipline:

- Formation of ecological thinking in future physicians during the study and evaluation of the impact of natural environmental factors on warm-blooded organisms.
- Ability to adequately assess the health status of the child population when the organism interacts with the environment.
- Development of skills in conducting preventive work and organizing medical care for the healthy population in various environmental conditions.

1.3. The place of the discipline in the structure of the main professional educational program of higher education.

In accordance with the Federal State Educational Standard of Higher Education (FGBOU VO) for the specialty 31.05.01 "Medical Affairs" (2020), the discipline "Hygiene" belongs to the basic

part of the curriculum, Block 1. The total workload is 6 credit units (216 hours), and it is taught in the 4th and 5th semesters on the 2nd and 3rd years. The form of control is an exam in the 5th semester.

The training of students is based on the continuity of knowledge and skills acquired in the school biology course of general educational institutions, as well as disciplines from the 1st and 2nd years. To master the discipline "Hygiene," theoretical knowledge and skills in biology, normal physiology, general chemistry, biological chemistry, and practical skills in preventive literacy, as provided by the school and university programs, are required.

The discipline "Hygiene" is a subject necessary for studying profile disciplines that are taught in parallel with this subject or in subsequent years. Mastering the discipline "Hygiene" should precede the study of: Latin language, history of medicine, philosophy, bioethics, physics, mathematics, anatomy, topographic anatomy, safety of life activities, disaster medicine, normal physiology, pathophysiology, clinical pathophysiology; biochemistry; histology, embryology, cytology.

The discipline "Hygiene" consists of 6 sections, which present the most important and necessary information defining the educational process:

1. Population Health - Environment. Fundamentals of Human Ecology
2. Nutrition and Human Health
3. Labor Hygiene and Occupational Health
4. Hygiene of Children and Adolescents
5. Hygiene of Healthcare Facilities
6. Military Hygiene

1.4 Requirements for students

To study the discipline "Hygiene," students must have a basic level of knowledge in the following subjects:

Latin language
Knowledge: Basic medical and hygienic terminology in Latin.
Skills: Ability to apply knowledge for communication and information retrieval from medical literature and medical documentation. (Level II-III)
Competencies: Use medical terminology in practice.
History of Medicine
Knowledge: Outstanding figures in medicine and healthcare, hygiene, Nobel laureates, outstanding medical discoveries in the field of hygiene, the influence of humanistic ideas on medicine and hygiene. (Level II-III)
Skills: Ability to competently and independently present and analyze the contributions of domestic scientists to the development of hygiene.
Competencies: Use medical terminology in practice.
Philosophy
Knowledge: Methods and techniques of philosophical analysis of problems; forms and methods of scientific cognition and their evolution; main patterns and trends of the development of the global historical process; laws of dialectical materialism in medicine and hygiene. (Level II-III)
Skills: Ability to competently and independently present, analyze forms and methods of scientific cognition and laws of dialectical materialism in medicine and hygiene.
Competencies: Master the basic concepts of medical error and the rights of patients and healthcare workers in the course of practical activities.
Bioethics
Knowledge: Moral and ethical norms, rules, and principles of professional behavior of a hygienist, main ethical documents regulating the activities of a hygienist. (Level II-III)
Skills: Ability to build and maintain working relationships with patients and other team mem-

bers.
Competencies: Master the basic concepts of medical error and the rights of patients and healthcare workers in the course of practical activities.
Microbiology with Virology
Knowledge: Classification, morphology, and physiology of microorganisms. Microbiological diagnosis of diseases. (Level II)
Skills: Ability to analyze the results of microbiological diagnosis of diseases; work with light and electron microscopes, taking into account safety rules.
Competencies: Master the basic concepts of morphology and physiology of microorganisms.
Physics, mathematics. Medical Biophysics
Knowledge: mathematical methods for solving intellectual problems and their application in medicine; theoretical foundations of computer science, collection, storage, search, processing, transformation, dissemination of information in medical and biological systems, the use of computer information systems in medicine and healthcare; principles of operation and devices used in medicine, fundamentals of physical and mathematical laws, those who receive medical treatment. (II-III level).
Skills: to be able to use educational, scientific, popular science literature, the Internet for professional activities, to work with equipment in accordance with safety regulations.
Competencies: to calculate quantitative indicators used in assessing public health, analyzing the activities of health authorities and institutions in modern socio-economic conditions.
Medical Informatics
Knowledge: theoretical foundations of computer science and principles of computer architecture architecture; work with text and graphic editors; preparation of presentations and the Internet.
Skills: to use computer equipment; to carry out basic statistical processing; to use the Internet; to use educational, popular science literature.
Competencies: possess basic information transformation technologies; work with text and tabular editors, search the Internet.
Biochemistry
Knowledge: the structure and biochemical properties of the main classes of biologically important compounds, the main metabolic pathways of their transformation; the role of cell membranes and their transport systems in metabolism.(II-III level).
Skills: be able to analyze the contribution of biochemical processes to the functioning of a living organism and biological systems, interpret the results of the most widespread laboratory diagnostic methods to identify pathological processes in a living organism and biological systems.
Competencies: master the basic concepts of biochemical properties of the main classes.
Biology
Knowledge: laws of genetics, its importance for medicine and hygiene; patterns of heredity and variability in individual development as the basis for understanding the pathogenesis and etiology of hereditary and multifactorial diseases; biosphere and ecology, the phenomenon of parasitism and bioecological diseases.(II-III level).
Skills: be able to analyze the patterns of heredity and variability in the development of a living organism and biological populations.
Competencies:to analyze the patterns of heredity and variability in individual development as the basis for understanding the pathogenesis and etiology of hereditary and multifactorial dis-

eases.
Normal physiology
Knowledge: Physiological functions of a living organism.
Skills: Ability to analyze a living organism in various ecological systems.
Competencies: Master the basic concepts of the functions of a living organism.
Safety of Life Activities, Disaster Medicine
Knowledge: Basic concepts of disaster medicine and safety of life activities.
Skills: Ability to analyze and apply in practice the basic principles of safety of life activities and disaster medicine in extreme and military situations.
Competencies: Apply in practice the basic principles of safety of life activities and disaster medicine in extreme and military situations.

1.5 Interdisciplinary links with subsequent disciplines

Knowledge, skills and abilities necessary for studying subsequent disciplines:

No. p/p	The name of the subsequent disciplines	Discipline sections					
		1	**2**	**3**	**4**	**5**	**6**
1	2	3	4	5	6	7	8
1	Propaedeutics of internal diseases, radiation diagnostics	+	+	+	+	+	+
2	Ophthalmology	+	+	+	+	+	+
3	Otorhinolaryngology	+	+	+	+	+	+
4	Dermatovenerology	+	+	+	+	+	+
5	Obstetrics and Gynecology	+	+	+	+	+	+
6	Pediatrics	+	+	+	+	+	+
7	Neurology, medical genetics, neurosurgery	+	+	+	+	+	+
8	Psychiatry, medical psychology	+	+	+	+	+	+
9	Forensic medicine	+	+	+	+	+	+
10	Medical rehabilitation	+	+	+	+	+	+
11	Faculty therapy, professional diseases	+	+	+	+	+	+
12	Hospital therapy, endocrinology	+	+	+	+	+	+
13	Infectious diseases	+	+	+	+	+	+
14	Phthisiology	+	+	+	+	+	+
15	Outpatient therapy	+	+	+	+	+	+
16	General surgery, radiation diagnostics	+	+	+	+	+	+
17	Anesthesiology, intensive care, intensive care	+	+	+	+	+	+
18	Faculty Surgery, Urology	+	+	+	+	+	+
19	Hospital surgery, pediatric surgery	+	+	+	+	+	+
20	Dentistry	+	+	+	+	+	+
21	Oncology, radiation therapy	+	+	+	+	+	+
22	Traumatology Orthopedics	+	+	+	+	+	+
23	Public health and public health, health economics	+	+	+	+	+	+
24	Physiology	+	+	+	+	+	+
25	Life safety, disaster medicine	+	+	+	+	+	+
26	Pathological anatomy, clinical pathological anatomy	+	+	+	+	+	+
27	Pathophysiology Clinical pathophysiology	+	+	+	+	+	+

1.6 Requirements for the results of mastering the discipline

The study of the discipline "Hygiene" is aimed at the formation of the following competencies: universal (CC-1, 4, 6) and general professional (CC-2, 10, 11).

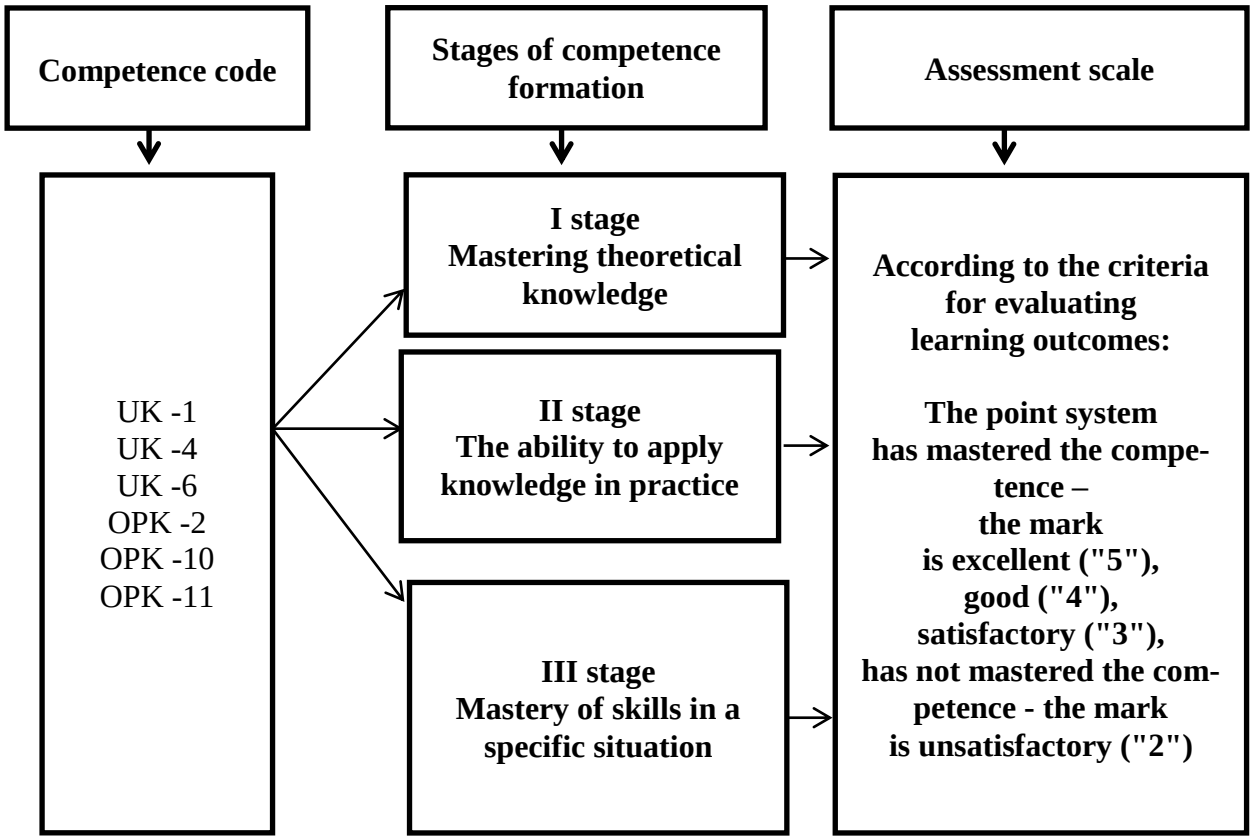
No. p/p	Code and name of the competence	The code and name of the competence achievement indicator
Universal competencies		
1	**UK-1.** He is able to carry out a critical analysis of problematic situations based on a systematic approach, develop an action strategy	**ID UK-1.1.** Analyzes a problematic situation as a system, identifying its components and the connections between them**.** **ID UK-1.2.** Identifies gaps in information needed to solve problematic situations and designs processes to eliminate them. **ID UK-1.3.** Applies system analysis to resolve problematic situations in the professional field.
	UK-4. Able to apply modern communication technologies, including in a foreign language(s), for academic and professional interaction	**ID UK-4.2.** Uses modern communication resources to search, process and transmit information necessary for the high-quality performance of professional tasks and the achievement of professionally significant goals.
	UK-6. He is able to determine and implement the priorities of his own activity and ways to improve it based on self-assessment and lifelong education	**ID UK-6.1.** Evaluates his personal, situational, and time resources and uses them optimally to complete the assigned task. **ID UK-6.3.** Performs a critical self-analysis of the results of his own activities.
General professional competencies		
2	**OPK-2.** He is able to carry out and monitor the effectiveness of preventive measures, the formation of a healthy lifestyle and sanitary and hygienic education of the population.	**ID OPK -2.1.** Uses methods of preventive medicine aimed at strengthening the health of the population. **ID OPK -2.2.** Promotes a healthy lifestyle aimed at improving sanitation and preventing diseases of patients (the population); organizes measures for sanitary and hygienic education and the formation of healthy lifestyle skills. **ID OPK -2.3.** Develops a work plan for the formation of a healthy lifestyle for various groups (staff and patients of medical organizations, various professional and social groups), taking into account the sanitary and epidemiological situation. **ID OPK -2.6.** Evaluates the characteristics of public health and environmental factors that affect the body, knows the biophysical mechanisms of such effects.
	OPK -10. It is capable of solving standard tasks of professional activity using information, biblio-	**ID OPK -10.2.** Performs an effective search for information necessary to solve the tasks of professional activity using legal information systems and profession-

	graphic resources, medical and biological terminology, information and communication technologies, taking into account the basic requirements of information security	al pharmaceutical databases. **ID OPK -10.3.** Uses specialized software for mathematical processing of observational and experimental data when solving problems in professional activities.
	OPK -11. Is able to prepare and apply scientific, scientific and production, design, organizational, managerial and regulatory documentation in the health care system	**ID OPK 11.1.** He applies modern methods of collecting and processing information, conducts statistical analysis of the data obtained in the professional field and interprets the results to solve professional problems. **ID OPK -11.2.** Identifies and analyzes problematic situations, searches for and selects scientific, regulatory, and organizational and administrative documentation in accordance with the set goals. **ID OPK -11.4.** Conducts scientific and practical research, analyzes information using the historical method, and makes publications based on research results.

Modules of the discipline and the code of the competence being formed

No. p/p	Section name	The code of the generated competence
1	Public health is the environment. Fundamentals of human ecology.	UK -1; UK -4; UK -6; OPK -2; OPK -10; OPK -11
2	Nutrition and human health	UK -1; UK -4; UK -6; OPK -2; OPK -10; OPK -11
3	Occupational hygiene and workers' health protection	UK -1; UK -4; UK -6; OPK -2; OPK -10; OPK -11
4	Hygiene of children and adolescents	UK -1; UK -4; UK -6; OPK -2; OPK -10; OPK -11
5	Hygiene of medical and preventive institutions	UK -1; UK -4; UK -6; OPK -2; OPK -10; OPK -11
6	Military hygiene	UK -1; UK -4; UK -6; OPK -2; OPK -10; OPK -11

1.7 Stages of competencies development and description of assessment scales



1.8 Forms of training organization and types of control

The form of organization of students' education	Brief description
Lectures	The lecture material contains the key and most problematic issues of the discipline, the most significant in the preparation of a specialist.
Practical exercises	They are intended for the analysis (consolidation) of theoretical positions and control over their assimilation, followed by the application of the acquired knowledge during the study of the topic.
Interactive forms of learning	- - solving situational tasks and exercises with subsequent discussion, - - interactive survey; - - performing creative tasks, - - the small group method, - - discussions, - - online course of discipline in the Moodle system, - - testing in the Moodle system.
Participation in the research work of the department, student circle and conferences	- - preparation of oral presentations and poster presentations for presentation at a student circle or scientific conference; - - writing theses and abstracts in the chosen scientific field; - - preparation of a literary review using educational, scientific, reference literature and online sources.
Types of control	**Brief description**
Entrance control	Examination of theoretical knowledge and practical skills formed by the computer science program in institutions of secondary (full-time) general education. The entrance control of knowledge includes: - testing in the Moodle system (input knowledge control test), - solving situational tasks and exercises. The results of the entrance control are systematized, analyzed and used by the teaching staff of the department to develop measures to improve and update the teaching methods of the discipline.
Current control	Current knowledge control includes: - verification of the solution of situational tasks and exercises performed independently (extracurricular independent work); - assessment of the assimilation of theoretical material (oral survey and computer testing); - control over the technique of performing the experiment in practical classes and registration of the protocol; - testing in the Moodle system on all subjects of the discipline (tests include questions of theoretical and practical nature); - - individual assignments (practical and theoretical) for each topic of the discipline being studied.
Intermediate certification	The intermediate assessment is represented by a test at the end of the 4th semester, a test with an assessment at the end of the 5th semester. The test includes the following stages:: - assessment of knowledge of theoretical material (oral interview and co-interview); - testing in the Moodle system (intermediate certification test); - checking the assimilation of practical skills and abilities;

	- - solving situational tasks and exercises on each subject of the discipline.

2. STRUCTURE AND CONTENT OF THE DISCIPLINE

2.1 Scope of the discipline and types of educational activities

No. p/p	Types of educational work	Total hours	Term	
			4	5
1	Lectures	36	28	8
2	Practical exercises	84	68	16
3	Independent work of students	60	48	12
	Exam	36		36
	Total labor intensity in hours	**216**	**144**	**72**
	Total labor intensity in credit units	**6**	**4**	**2**

2.2 Thematic plan of lectures and their content

Item No.	Topics and content of lectures	Codes of formed competencies	Workload intensity (hours)
	4 term		
1	**Introduction to the subject. Fundamental concepts of hygiene** Subject matter, objectives and methods of hygiene. Relationship between hygiene and human ecology as well as other sciences. Importance of hygiene in shaping pediatrician's thinking. Factors that determine health. Impact of ecological factors on public health. Ecoiatology and environmentally induced diseases. Preventive orientation of domestic medicine. Factors influencing population health (genetic, climatic-natural, endemic, epidemiological, occupational, social, environmental). Environmental factors and public health, tasks of hygienic science and sanitary practice in managing the system "human-being–environment". Systemic and factorial analysis of environmental impact on public health condition. Structure, activities and goals of sanitary-epidemiological service. Sanitary legislation. Law "On Sanitary-Epidemiological Wellbeing of Population." External environment as a factor determining living conditions for an organism. Unity of organism and external environment. Increased sensitivity of children and adolescents' organisms to external influences. Content and objectives of hygienic science. Methods of hygienic research. Place of hygiene within medical knowledge complex. Content and prospects of development of various branches of hygienic science. History of formation and evolution of hygiene. Hygiene in ancient times (Hippocrates), early Middle Ages and Renaissance period. Formation and development of experimental-scientific hygiene (Max von Pettenkofer). Establishment of hygiene as independent discipline by mid-XIX century. Hygiene in Russia. Activities of F.F.Erisman and A.P.Dobrolslavin. Development of hygiene over subsequent years. Emergence of specialized fields of hygiene. School hygiene. Role of Russian therapists (G.A.Zakharjin, S.P.Botkin) and pediatricians (S.F.Khotovitsky, I.A.Tolsky, N.P.Gundobin, A.A.Kiselyov) in its development. A.V.Molkov — founder of children's and adolescent hygiene. Current stage of children's and adolescent hygiene development in Russia and abroad. Protection of children's and adolescent health in RF is a state task. Organic connection between hygiene and pediatrics in protecting child population's health.	UK -1; UK -4; UK -6; OPK-2; OPK-10; OPK-11	2

2	**Hygienic Aspects of Hospital Construction** Main Tasks of Hospital Hygiene. Modern Hygienic Problems in Hospital Construction. Hygienic Requirements for Hospital Location and Layout Planning of Hospital Grounds. Systems of Hospital Building Development, Zoning of Hospital Areas. Hygienic Requirements for Design and Equipment of Reception Department, Ward Sections, Diagnostic Departments (Operating Block, X-ray and Radiological Units). Layout and Work Regime in Therapeutic, Surgical, Pediatric, Obstetric and Infectious Disease Wards. System of Sanitary-Hygienic Measures for Creating Protective Environment and Favourable Conditions for Patients Stay at Medical Facility.	UK -1; UK -4; UK -6; OPK-2; OPK-10; OPK-11	2
3	**Sanitary-Hygienic Provision of Thermal and Lighting Regimes in Hospitals** Atmospheric air as an external environment. Complex influence of meteorological factors on the human body. Meteorotropic reactions. The effect of light and thermal microclimate on the human body. SanPiN standards for thermal and lighting parameters in hospital institutions. Atmospheric air as an external environment. Gas composition of atmospheric air and its influence on vital activity of the child's body. Physical factors of atmospheric air: barometric pressure, temperature, humidity, speed of movement. Changes in atmospheric pressure with elevation gain. Mountain sickness and altitude illness, their prevention. Effect of high and low temperatures on the body. Effect of high and low humidity on the body. Effect of wind speed on the body. Combined influence of meteorological factors on thermoregulation of the body. Features of thermoregulation in children. Hyperthermia, heat stroke, solar stroke. Hygienic regulation of microclimate. Prevention of hyperthermia and hypothermia.	UK -1; УК-4; УК-6; OPK-2; OPK-10; OPK-11	2
4	**The Concept of "Lighting Mode." Natural and Artificial Lighting**. Natural and artificial sources of light radiation. Solar radiation. Reasons for its changes. Biological effects of solar radiation on the environment and human health. Use of ultraviolet radiation for preventive purposes. Sources of irradiation. Irradiation systems.	UK -1; UK -4; UK -6; OPK-2; OPK-10; OPK-11	2
5	**Prevention of Nosocomial Infection: Etiology and Prophylaxis** Hygienic aspects of nosocomial infection prevention including planning measures, sanitary-engineering facilities, disinfection procedures. Sanitary-hygienic and anti-epidemic regime in hospitals.	UK -1; UK -4; UK -6; OPK-2; OPK-10; OPK-11	2
6	**Provision of Radiation Safety in Hospitals. Principles of Radiation Protection.** Occupational hygiene when working with radioactive substances and ionizing radia-	UK -1; UK -4; UK -6; OPK-2; OPK-10; OPK-11	2

	tion sources. Application in economic activities and medicine. Biological effects of ionizing radiations. Characteristics of main types of radiation (alpha, beta, gamma, x-ray). Factors determining radiation hazard during work with radioactive materials. Understanding of radiotoxicity. Maximum permissible doses of external and internal exposure. Acceptable levels of surface radioactive contamination. Main methods of radiometric studies and sanitary-dosimetric control. Prevention of radiation injuries from external exposure and incorporation, general and individual protective measures. Basic principles of layout design for radiological laboratories. Hygienic requirements for placement, layout and equipment of radiological departments in hospitals. Collection, disposal, transportation and deactivation of radioactive waste in radiological departments of hospitals.		
7	**Climate and Health** Natural-geographical habitat conditions and health of children and adolescents. Weather, definition and medical classification of weather types. Periodic and nonperiodic weather changes. Biorhythm and health. Seasonal factor in human pathology. Effects of changing weather conditions, atmospheric pressure, fluctuations in solar activity, geomagnetic field on health and performance. Heliometeorotropic reactions and their prevention. Climate, concept definition. Construction-climatic zoning of Russia's territory. Impact of climate conditions on human health. Meteosensitivity. Problem of acclimatization. Hygienic measures promoting adaptation in Northern and Southern regions. Specific features of children and adolescents' acclimatization. Using climate for therapeutic and wellness purposes.	UK -1; UK -4; UK -6; OPK-2; OPK-10; OPK-11	2
8	**Solar Radiation from a Hygienic Perspective** Solar radiation and its biological action. Brief characteristics of separate areas of the solar spectrum: infrared, visible, and ultraviolet. Variation of the solar spectrum near Earth's surface depending on the height of the Sun above horizon and atmosphere transparency. Concept of light climate. Significance of infrared, visible, and ultraviolet parts of the solar spectrum. Characteristics of biological actions of different areas of UVR-spectrum (A, B, C). Exposure dosages: erythema-inducing, hardening, vitamin-forming. Ultraviolet deficiency. Increased sensitivity of children's bodies to UV-deficiency. Prevention of UV-deficiency among children and teenagers. Artificial sources of ultraviolet radiation. Dosing methods. Indications and contraindications for application. Methods of preventive irradiation in children groups (light-exposure installations and photariums).	UK -1; UK -4; UK -6; OPK-2; OPK-10; OPK-11	2

9	**Electrical State of Air Environment. Human Interaction Peculiarities**. Problems associated with electromagnetic rays affecting the human body. Physical characteristics of EMF (electromagnetic fields). Biophysical mechanisms of interaction between EMF and biological objects. Biological effects of naturally occurring EMF. Constant magnetic fields. Industrial frequency EMF of 50 Hz. Prevention of adverse effects caused by EMF.	UK -1; UK -4; UK -6; ОРК-2; ОРК-10; ОРК-11	2
10	**Nutrition as a Factor of Health.** Significance of balanced nutrition for physical development and health, increased productivity and biological resistance of children and adolescents. Nutritious, antipituitary and foreign substances in food products. Toxic substances. Objectives of sanitary examination of food products. Concept of nutritional status. Analysis of various theories of nutrition (vegetarianism, raw food diet, fasting, 'separate' eating etc.). Features of organizing children's nutrition.	UK -1; UK -4; UK -6; ОРК-2; ОРК-10; ОРК-11	2
11	**Hygienic Aspects of Rational Nutrition**. *Fats:* Their dietary and biological value. The role of fats in children's nutrition. Biological importance of fatty acids and food substances delivered with fats (phosphatides, sterins) for growth and development of the child's body. Food products as fat sources. Fat digestibility as essential component of children's diets. Fat needs for children of different ages. *Carbohydrates:* Their significance in children's nutrition. Nutritional value of specific carbohydrate-containing foods. Negative impact of excessive carbohydrate intake in children's diets. Carbohydrate needs for children of different ages. *Proteins:* Their dietary and biological value. Biological function of irreplaceable amino acids. Rational selection of animal and plant-based foods to create a balanced amino acid profile in meals. Protein needs for children and adolescents. *Vitamins:* Their importance for children's health. *Fat-soluble vitamins*: Vitamin A, its biological role. Children's age-specific need for vitamin A. Hypo- and hypervitaminosis A. Group D vitamins, their biological role. Manifestations of vitamin D insufficiency in children. Age-related and climate-dependent demand for vitamin D. Hypervitaminosis D. Vitamin E, its biological role. Products rich in vitamin E. Group K vitamins. *Water-soluble vitamins*: Vitamin C, its biological role. Product sources and requirement based on age and climate. Factors destroying vitamin C and stabilizers. Vitamin R, its biological role. Product sources and required amounts. Group B vitamins (B_1 , B_2 , PP, B_6 , B_{12}), their biological roles, product sources, and needs for	UK -1; UK -4; UK -6; ОРК-2; ОРК-10; ОРК-11	2

	children and adolescents. Prevention of hypovitaminosis states in children. Fortification of food products and rations with vitamins. *Minerals:* Their role in feeding children and adolescents. Calcium, its importance for growth and development of the child's body. Calcium absorption and how it is affected by ratios with other substances. Foods rich in calcium. Calcium needs for children, pregnant women, and breastfeeding mothers. Phosphorus, its biological role. Food sources of phosphorus. Phosphorus needs for children and adolescents. Magnesium, its biological role. Food sources of magnesium. Magnesium needs for children and adolescents. Role of trace elements in children's nutrition. Endemic goiter, preventative measures. Rational choice of foods to ensure optimal mineral balance in children's and adolescents' diets. *Eating Schedule and Its Physiological Value.*		
12	**Hygienic Assessment of Food and Biological Value of Dietary Products.** *Dairy Products:* Milk and dairy products, their nutritional value and significance in the diet of children. The role of milk and dairy products in creating a balanced amino acid and mineral composition in mixed diets. Epidemiological significance of milk. Methods of milk disinfection: pasteurization, boiling, sterilization. Their hygienic characteristics. *Meat and Meat Products:* Their nutritional value and significance in children's nutrition. Infectious and invasive diseases transmitted through meat consumption, preventive measures. *Fish and Fish Products:* Their nutritional value and significance in children's nutrition. Parasitic infections related to fish consumption, preventive measures. *Eggs:* Their nutritional value and significance in children's nutrition. *Cereal Products:* Their nutritional value and significance in children's nutrition. Nutritional value of bread. Vitamization of bread. *Vegetables, Fruits, Berries:* Their nutritional value and significance in children's nutrition. *Sugar, Sweeteners, Confectionery Items:* Their nutritional value and significance in children's nutrition. *Conserves and Concentrates:* Their nutritional value and significance in children's nutrition. *Food Additives:* Measures ensuring food quality, biological value, and safety of food products. Enrichment of food products with biologically active substances (amino ac-	UK -1; UK -4; UK -6; OPK-2; OPK-10; OPK-11	2

	ids, phosphatides, polyunsaturated fatty acids, vitamins). *Methods of Food Preservation:* High and low temperature treatment, dehydration, increasing osmotic pressure, pickling, use of antiseptic agents, smoking. *Laboratory Testing Methods:* For assessing the quality of individual food products.		
13	**Prevention of Food Poisonings. Main Causes and Preventive Measures** Classification of Food Poisonings Food poisonings can be classified into two major categories: 1. Microbial origin (bacterial or fungal) 2. Non-microbial origin (chemical contaminants, toxic plants, etc.) Microbial Food Poisonings - *Toxico-infections:* Salmonella, opportunistic bacteria (coliforms, staphylococcus, clostridium perfringens). - *Intoxications:* Botulism, staph food poisoning. - *Mycotoxin poisonings:* Ergotism, fusarium mycotoxicoses, aflatoxicosis. Role of contaminated food products in causing microbial food poisonings. Investigation of such cases and preventive measures. Non-Microbial Food Poisonings - Mushroom poisoning. - Poisoning by some wild-growing toxic plants. - Poisoning by temporarily acquired toxicity in foods (solanine in potatoes, fish organs). - Weed toxikoses: heliotropine toxikosis, trichodesmium toxikosis. - Poisoning by inorganic compounds (copper, zinc, nitrites, etc.). - Potential acute and chronic pesticide poisoning. Preventive measures against these types of poisonings. Organization of Nutrition in Child Collectives Differentiated nutrition for children and adolescents in kindergartens, schools, boarding schools, vocational training institutes according to age. Study methods for monitoring nutrition. Medical supervision of quantitative and qualitative aspects of the diet and meal schedule for children and adolescents. Hygienic Requirements - Planning, equipping, and maintaining kitchens in educational establishments. - Quality assurance of food products, storage, transport, culinary processing. - Cleaning and disinfection of tableware and kitchen utensils.	UK -1; UK -4; UK -6; ОРК-2; ОРК-10; ОРК-11	2

	- Personal and industrial hygiene of catering staff members.22:16		
14	**Organization of meals for troops in the field.** General provisions. Military water supply facilities. Water consumption standards and water quality requirements. Exploration on the water. Hygienic assessment of water sources. Water supply points and water collection points. Hygienic features of the water supply of a military unit in the offensive and defense. Water purification in the field.	UK -1; UK -4; UK -6; OPK-2; OPK-10; OPK-11	2
	Total hours in 4 semesters:		**28**
	5th semester		
15	**Sources of Water Supply and Their Hygienic Significance. Sanitary-Hygienic Indicators of Water Quality. Water Supply Hygiene in Field** Conditions for Military Forces Physiological and Hygienic Importance of Water - Role of water in spreading infectious diseases. - Chemical composition of water leading to infectious diseases. - Trace elements in water and their significance. Fluorosis. - Benefits of fluoridation for preventing dental caries in children. - Salt content of water. Sulfates and chlorides. - Nitrates and their role in methemoglobinemia in children. - Course of methemoglobinemia in infants. - Contamination of water with toxic substances. Hygienic Requirements for Drinking Water Quality Indicators ensuring safety regarding epidemics, chemical harmlessness, and favorable organoleptic properties. Standards: GOST 2874-82 and SanPiN 2.1.4.559-96. Water Resources Distribution and Depletion Risks Types of natural water sources: underground (groundwater, interlayer aquifers, artesian waters) and open reservoirs (rivers, lakes, reservoirs). Comparative hygienic assessment. Pollution of water resources due to rapid industrial development and agricultural chemicals usage. Self-purification processes in water bodies. Permissible concentrations of harmful substances in water bodies and their justification. Sanitary protection of water bodies: key solutions to problems. Selection of Water Supplies for Urban/Rural Settlements, Hospitals, Summer Camps,	UK -1; UK -4; UK -6; OPK-2; OPK-10; OPK-11	2

	Field Locations "Gigienicheskie trebovaniya k kachestvu vodoistochnikov pri tsentralizovanom vodosnabzhenii" (Hygienic Requirements for Centralized Water Supply Source Quality). Standard: GOST 2761-84. Decentralized water supply. Sanitary regulations for constructing wells and tube-wells. Disinfection of wells. Chlorination process in wells. Local water supply surveillance in rural areas. Sanitary protection of water supplies. Methods for Improving Drinking Water Quality Clarifying techniques: sedimentation, coagulation, filtration. Types of filters. Sterilization methods: chemical and physical means. Chlorination as primary method (mechanisms of bactericidal action, factors affecting efficiency, dose selection, normal chlorination, hyperchlorination, ammonization-chlorination, disadvantages of chlorination). Individual water reserves purification. Special methods of improving drinking water quality (softening, desalinization, defluoridation, fluoridation). Physiological, Epidemiological, Domestic Importance of Water Organization of water supply. Water supply for military forces in field conditions, peculiarities and organization. Stages of deploying Water Supply Points (PSV) under field conditions. Responsibilities assigned to stages of PSV deployment. Norms of water consumption and quality requirements. Sampling procedure for testing. Hygienic evaluation of water sources and reconnaissance for water search. Components of water supply points. Equipped means for storing and transporting potable water. Improvement of water quality in field settings. Facilities for enhancing water quality. Disinfection of water in extreme conditions. Engineering services capabilities for providing field water supply.		
16	**Hygienic Aspects of Industrial Labor. Prevention of Harmful Effects of Production-Related Physical Factors** Key Legislation on Occupational Safety Legal norms regulating labor, protection of female workers and teenage employees, hazardous industries where employment of minors is prohibited. Foundations of Labor Physiology Mental vs. physical labor. Changes in the body during work. Fatigue and overwork. Overexertion. Prevention of fatigue in manual labor. Importance of mechanization, automation, and ergonomic workplace design in preventing exhaustion. Hygiene of mental labor.	UK -1; UK -4; UK -6; OPK-2; OPK-10; OPK-11	2

	Hazardous Working Conditions and Professional Illnesses Impact of professional factors in developing occupational illnesses. General principles of implementing health-improvement measures in industry. Technological modifications aimed at reducing risks. Hygienic benefits of mechanization, comprehensive automation, and hermetically sealed equipment. Industrial ventilation (natural and mechanical). Air conditioning, illumination of factories. Impact of lighting level on worker productivity and accident rates. Regulation of natural and artificial lighting in production premises. Technical aesthetics. Preliminary and periodic medical examinations. Treatment-prophylactic nutrition. Personal protective gear. Role of teen clinics in preventing occupational diseases among youths. Monitoring on Industrial Enterprises Content and objectives of preventive and ongoing sanitary inspection. Ecological assessment of emissions and wastes generated by production processes. Microclimatic Conditions in Different Industries Professional hazards in hot workshops and outdoor jobs. Diseases resulting from unfavorable microclimatic conditions. Measures to prevent overheating and chilling. Restrictions on employing teens in harsh environments. Noise and Vibration in Industry Classification of noises by spectral composition. Noise sources. Impact of noise on the body. Allowable noise levels in industry. Measures to reduce harmful noise impacts. Biological effects of vibration depending on frequency and amplitude. Industrial sources of vibrations. Vibratory disease. Limitations on using teen labor in noisy and vibratory workplaces. Industrial Trauma Major causes of accidents at work. Measures to prevent trauma in young workers. Eye injury prevention. Pyoderma skin infections in teenagers. Preventive measures.		
17	**Industrial Dust Pathologies, Preventive Measures. Industrial Poisoning Prevention. Agricultural Labor Hygiene** Industrial Dust Pathology Industrial dust. Occupational diseases linked to work in highly dusty production environments. Types of pneumoconiosis: silicosis, siderosis, anthracosis. Prevention measures for pneumoconiosis. Restriction of minor employment in dust-heavy industries. Industrial Poisoning	UK -1; UK -4; UK -6; OPK-2; OPK-10; OPK-11	2

	Definition of industrial poisons and occupational poisoning. General patterns of industrial poison action. Acute and chronic poisoning. Long-term consequences of industrial poisoning. Common preventive measures against occupational poisoning. Hygienic standards for acceptable levels of toxic substances in factory air. Restrictions on minor employment in these industries. Cases of carbon monoxide poisoning, irritant gases, heavy metals, organic solvents, etc., and preventive measures. Agriculture Workplace Hygiene Professional hazards associated with operating farm machinery and their prevention. Hazards involved in handling pesticides. Sanitary rules for storage, transportation, and application of pesticides in agriculture. Banning minors, pregnant women, and nursing mothers from pesticide-handling operations. Occupational hazards in livestock farms. Agricultural trauma and measures to combat it.		
18	**Hygienic Aspects of Medicine in Disasters. Hygiene of Children and Adolescents** Definition of disaster*:* An event leading to significant damage, casualties, and disruption of life support systems requiring urgent intervention. Medicine in disasters*:* A branch of healthcare dealing with preparedness, response, and recovery from catastrophic events. Reasons for growing hygienic challenges in disaster medicine*:* Mass displacement, infrastructure collapse, contamination of water and food supplies, spread of communicable diseases. Characteristics of disasters: Natural (earthquakes, floods, hurricanes); man-made (accidents, terrorist attacks, wars); technological (nuclear incidents, chemical spills). Factors contributing to morbidity and mortality*:* Injuries, burns, psychological stress, infections, malnutrition, lack of clean water and shelter. *Healthcare professionals' role in post-disaster relief:* Emergency medical care, vaccination campaigns, distribution of essentials like food and water, psychological counseling. Monitoring local populations' health*:* Surveillance of diseases, screening for contagious outbreaks, addressing long-term health issues arising after disasters. Stages of disaster management*:* Preparedness, immediate response, short-term recovery, reconstruction phase. Nuclear power plant disasters*:* Classification of exposed individuals, participating agencies, phases following an incident. Challenges in water supply during disasters: Lack of safe drinking water, risk of wa-	UK -1; UK -4; UK -6; OPK-2; OPK-10; OPK-11	2

	terborne diseases, rehabilitation strategies. Effects of strong-acting toxic substances*:* Symptoms, first aid measures, decontamination protocols. Organizing sanitary-hygienic and anti-epidemic efforts*:* Setting up temporary camps, mobile units, coordinating international assistance. Principles of sanitary-hygienic measures*:* Cleanliness, quarantine zones, immunizations, proper waste disposal. Enhancing effectiveness of sanitation works*:* Logistical optimization, efficient communication networks, sufficient resource allocation. International cooperation and control*:* Sharing best practices, joint responses, coordination with global organizations. Requirements for school and preschool institutions*:* Adequate sanitary facilities, healthy nutrition, safety precautions. Physical development of children and adolescents: Growth charts, fitness assessments, readiness for schooling.		
	Total hours in 5 semesters:		**8**
	Total hours:		**36**

2.3 Thematic plan of practical classes and their content.

No. p/p	Name of the topics of practical classes	Contents of practical classes	Codes of formed competencies and indicators of their achievements	Types of control	Workload intensity (hours)
4th semester					
1	The role and place of chemistry in the system of medical sciences.	Entrance control (verification of theoretical knowledge and practical skills formed by the computer science program in institutions of secondary (full) general education. **The theoretical part:** Basic concepts of hygiene. The concept of hygienic science. The concept of hygiene. Types of hygiene. The nature of hygiene. Hygiene features. The objectivity of hygiene. The authenticity of hygiene. Accessibility of hygiene. The relevance of hygiene. Hygiene measures. Hygiene tasks. **The practical part:** Solving test tasks.	UK -1: ID 1.1, 1.2, 1.3 UK-4: ID 4.2 UK-6: ID 6.1, 6.3 OPK-2: ID 2.1, 2.2, 2.3, 2.6 OPK-10: ID 10.2, 10,3 OPK-11: ID 11.1, 11.2, 11.4	Problem solving, front-end survey, testing in the Moodle system.	4,25
2	Hygienic assessment of the hospital layout.	**The theoretical part:** The concept of hospital layout. Types of hospital planning. **The practical part:** Description of the layout of hospitals used in medicine.	UK -1: ID 1.1, 1.2, 1.3 UK-4: ID 4.2 UK-6: ID 6.1, 6.3 OPK-2: ID 2.1, 2.2, 2.3, 2.6 OPK-10: ID 10.2, 10,3 OPK-11: ID 11.1, 11.2, 11.4	Front-end survey, solving situational tasks, working on a practical assignment, and testing in the Moodle system.	4,25
3	Hygienic assessment of temperature and humidity conditions in hospital premises.	**The theoretical part:** Hygienic assessment, and concepts of air temperature and humidity. **The practical part:** Problem solving, applying in hygienic science and	UK -1: ID 1.1, 1.2, 1.3 UK-4: ID 4.2 UK-6: ID 6.1, 6.3 OPK-2: ID 2.1, 2.2, 2.3, 2.6 OPK-10: ID 10.2, 10,3	Front-end survey, solving situational tasks, working on a practical	4,25

		practice	OPK-11: ID 11.1, 11.2, 11.4	assignment, and testing in the Moodle system.	
4	Hygienic assessment of the frequency of respiration in hospital premises.	**The theoretical part:** Analysis of the air frequency in the hospital **The practical part:** Assessment of the air quality in the hospital premises.	UK -1: ID 1.1, 1.2, 1.3 UK-4: ID 4.2 UK-6: ID 6.1, 6.3 OPK-2: ID 2.1, 2.2, 2.3, 2.6 OPK-10: ID 10.2, 10,3 OPK-11: ID 11.1, 11.2, 11.4	Front-end survey, solving situational tasks, working on a practical assignment, and testing in the Moodle system.	4,25
5	Hygienic assessment of the natural light regime in the hospital premises.	**The theoretical part:** The concept of the light regime in hospitals **The practical part:** Assessment using medical devices and analytical methods, the light regime in the hospital.	UK -1: ID 1.1, 1.2, 1.3 UK-4: ID 4.2 UK-6: ID 6.1, 6.3 OPK-2: ID 2.1, 2.2, 2.3, 2.6 OPK-10: ID 10.2, 10,3 OPK-11: ID 11.1, 11.2, 11.4	Front-end survey, solving situational tasks, working on a practical assignment, and testing in the Moodle system.	4,25
6	Hygienic assessment of artificial light regime in hospital premises.	**The theoretical part:** The concept of the lighting regime in hospitals, artificial lighting. **The practical part:** Assessment using medical devices and analytical methods, the light regime in the hospital.	UK -1: ID 1.1, 1.2, 1.3 UK-4: ID 4.2 UK-6: ID 6.1, 6.3 OPK-2: ID 2.1, 2.2, 2.3, 2.6 OPK-10: ID 10.2, 10,3 OPK-11: ID 11.1, 11.2, 11.4	Front-end survey, solving situational tasks, working on a practical assignment, and testing in the Moodle system.	4,25
7	Ensuring radiation safety in the hospital.	**The theoretical part:** Concepts of radiation safety in the hospital **The practical part:** Determination of radiation safety using medical devices and analytical methods.	UK -1: ID 1.1, 1.2, 1.3 UK-4: ID 4.2 UK-6: ID 6.1, 6.3 OPK-2: ID 2.1, 2.2, 2.3, 2.6 OPK-10: ID 10.2, 10,3 OPK-11: ID 11.1, 11.2, 11.4	Front-end survey, solving situational tasks, working on a practical assignment, and	4,25

				testing in the Moodle system.	
8	Prevention of nosocomial infection.	**The theoretical part:** Concepts of the VBI **The practical part:** Determination of VBI criteria using medical devices and analytical methods	UK -1: ID 1.1, 1.2, 1.3 UK-4: ID 4.2 UK-6: ID 6.1, 6.3 OPK-2: ID 2.1, 2.2, 2.3, 2.6 OPK-10: ID 10.2, 10,3 OPK-11: ID 11.1, 11.2, 11.4	Front-end survey, solving situational tasks, working on a practical assignment, and testing in the Moodle system.	4,25
9	Sanitary and hygienic examination of the hospital department	**The theoretical part:** The concept of sanitary and hygienic examination of the hospital **The practical part:** Determination of criteria for hospital conditions using medical devices and analytical methods	UK -1: ID 1.1, 1.2, 1.3 UK-4: ID 4.2 UK-6: ID 6.1, 6.3 OPK-2: ID 2.1, 2.2, 2.3, 2.6 OPK-10: ID 10.2, 10,3 OPK-11: ID 11.1, 11.2, 11.4	Interview, solving problems and exercises, testing in the Moodle system.	4,25
10	The final lesson on hospital hygiene.	**The theoretical part:** Knowledge check based on the completed knowledge course **The practical part:** Working with library information systems.	UK -1: ID 1.1, 1.2, 1.3 UK-4: ID 4.2 UK-6: ID 6.1, 6.3 OPK-2: ID 2.1, 2.2, 2.3, 2.6 OPK-10: ID 10.2, 10,3 OPK-11: ID 11.1, 11.2, 11.4	Front-end survey, solving situational tasks, working on a practical assignment, and testing in the Moodle system.	4,25
11	Hygienic assessment of the quality of food products.	**The theoretical part:** Concepts of food quality **The practical part:** Food quality determination	UK -1: ID 1.1, 1.2, 1.3 UK-4: ID 4.2 UK-6: ID 6.1, 6.3 OPK-2: ID 2.1, 2.2, 2.3, 2.6 OPK-10: ID 10.2, 10,3 OPK-11: ID 11.1, 11.2, 11.4	Front-end survey, solving situational tasks, working on a practical assignment, and testing in the Moodle system.	4,25
12	Hygienic assessment	**The theoretical part:**	UK -1: ID 1.1, 1.2, 1.3	Front-end sur-	4,25

	of the adequacy of nutrition of the population.	Concepts and analysis of population adequacy **The practical part:** Perform calculations in electronic tables using functions. A set of formulas**.**	UK-4: ID 4.2 UK-6: ID 6.1, 6.3 OPK-2: ID 2.1, 2.2, 2.3, 2.6 OPK-10: ID 10.2, 10,3 OPK-11: ID 11.1, 11.2, 11.4	vey, solving situational tasks, working on a practical assignment, and testing in the Moodle system.	
13	Prevention of microbial food poisoning.	**The theoretical part:** Concepts of food poisoning, classification **The practical part:** Determination of food poisoning by anamnesis, symptoms, preventive measures of food poisoning.	UK -1: ID 1.1, 1.2, 1.3 UK-4: ID 4.2 UK-6: ID 6.1, 6.3 OPK-2: ID 2.1, 2.2, 2.3, 2.6 OPK-10: ID 10.2, 10,3 OPK-11: ID 11.1, 11.2, 11.4	Front-end survey, solving situational tasks, working on a practical assignment, and testing in the Moodle system.	4,25
14	Prevention of non-microbial food poisoning.	**The theoretical part:** The concept of non-microbial food poisoning **The practical part:** Based on the symptom complex established in the patient. Determination of food poisoning by anamnesis, symptoms, preventive measures of food poisoning.	UK -1: ID 1.1, 1.2, 1.3 UK-4: ID 4.2 UK-6: ID 6.1, 6.3 OPK-2: ID 2.1, 2.2, 2.3, 2.6 OPK-10: ID 10.2, 10,3 OPK-11: ID 11.1, 11.2, 11.4	Front-end survey, solving situational tasks, working on a practical assignment, and testing in the Moodle system.	4,25
15	Hygiene of nutrition of troops in the field.	**The theoretical part:** The concept and criteria of nutrition of troops in the field **The practical part:** Solving test tasks.	UK -1: ID 1.1, 1.2, 1.3 UK-4: ID 4.2 UK-6: ID 6.1, 6.3 OPK-2: ID 2.1, 2.2, 2.3, 2.6 OPK-10: ID 10.2, 10,3 OPK-11: ID 11.1, 11.2, 11.4	Interview, solving problems and exercises, testing in the Moodle system.	4,25
16	The final lesson on food hygiene. The final lesson of the semester.	The intermediate certification includes: - assessment of knowledge of theoretical material; - testing in the Moodle system; - checking the assimilation of practical skills and	UK -1: ID 1.1, 1.2, 1.3 UK-4: ID 4.2 UK-6: ID 6.1, 6.3 OPK-2: ID 2.1, 2.2, 2.3, 2.6	Interview, solving problems and exercises, testing in the	4,25

		abilities; – - solving situational tasks and exercises.	ОРК-10: ID 10.2, 10,3 ОРК-11: ID 11.1, 11.2, 11.4	Moodle system	
Total hours in 5 semesters:					**68**
	5th semester				
1	Hygiene of water supply in populated areas. Hygiene of water supply to troops	**The theoretical part:** The concept of water supply in populated areas, the concept of hygiene of water supply to troops. **The practical part:** Study and describe: - methods for determining the composition of tap water; - methods of water purification in stationary and field conditions; - - methods for assessing the purity of water according to sanitary standards.	UK -1: ID 1.1, 1.2, 1.3 UK-4: ID 4.2 UK-6: ID 6.1, 6.3 ОРК-2: ID 2.1, 2.2, 2.3, 2.6 ОРК-10: ID 10.2, 10,3 ОРК-11: ID 11.1, 11.2, 11.4	Front-end survey, solving situational tasks, working on a practical assignment, and testing in the Moodle system.	2
2	Physiological and hygienic aspects of industrial work. Hygienic assessment of meteorological factors in production.	**The theoretical part:** The concept of industrial labor, the concept of metofactors in production. **The practical part:** Study and describe: - devices for determining meteorological factors in production - devices for determining the physiological aspects of work - - reporting.	UK -1: ID 1.1, 1.2, 1.3 UK-4: ID 4.2 UK-6: ID 6.1, 6.3 ОРК-2: ID 2.1, 2.2, 2.3, 2.6 ОРК-10: ID 10.2, 10,3 ОРК-11: ID 11.1, 11.2, 11.4	Front-end survey, solving situational tasks, working on a practical assignment, and testing in the Moodle system.	2
3	Hygienic characteristics of physical and chemical factors in production. Prevention of industrial herbalism. Occupational hygiene in schools.	**The theoretical part:** The concept of physical and chemical factors of production, occupational injuries from a hygienic perspective. the concept of labor in the military **The practical part:** Study and describe: - devices for the determination of chemical and physical factors of production,	UK -1: ID 1.1, 1.2, 1.3 UK-4: ID 4.2 UK-6: ID 6.1, 6.3 ОРК-2: ID 2.1, 2.2, 2.3, 2.6 ОРК-10: ID 10.2, 10,3 ОРК-11: ID 11.1, 11.2, 11.4	Front-end survey, solving situational tasks, working on a practical assignment, and testing in the Moodle system.	2

		- - devices for studying working conditions in schools, working with reports.			
4	The final lesson on occupational health.	**The theoretical part:** Summarizing the results on occupational health. **The practical part:** - work with the reference material. - work with regulatory material - work with the electronic regulatory framework - - working with the practical doctor's handbook.	UK -1: ID 1.1, 1.2, 1.3 UK-4: ID 4.2 UK-6: ID 6.1, 6.3 OPK-2: ID 2.1, 2.2, 2.3, 2.6 OPK-10: ID 10.2, 10,3 OPK-11: ID 11.1, 11.2, 11.4	Front-end survey, solving situational tasks, working on a practical assignment, and testing in the Moodle system.	2
5	Sanitary and hygienic provision of preschool institutions. Sanitary and hygienic provision of schools.	**The theoretical part:** The concept of providing preschool and school facilities, equipment, requirements for buildings, land plots **The practical part:** - sanitary and hygienic study in the facilities of school and preschool institutions	UK -1: ID 1.1, 1.2, 1.3 UK-4: ID 4.2 UK-6: ID 6.1, 6.3 OPK-2: ID 2.1, 2.2, 2.3, 2.6 OPK-10: ID 10.2, 10,3 OPK-11: ID 11.1, 11.2, 11.4	Interview, solving problems and exercises, testing in the Moodle system.	2
6	Hygiene of the educational process. Assessment of physical development of children and adolescents.	**The theoretical part:** The concept and justification of the educational process in educational institutions. Theoretical foundations of the study of the development of children and adolescents. **The practical part:** - sanitary and hygienic study at the school and preschool facilities - study of the regulatory framework	UK -1: ID 1.1, 1.2, 1.3 UK-4: ID 4.2 UK-6: ID 6.1, 6.3 OPK-2: ID 2.1, 2.2, 2.3, 2.6 OPK-10: ID 10.2, 10,3 OPK-11: ID 11.1, 11.2, 11.4	Interview, solving problems and exercises, testing in the Moodle system	2
7	Final lesson on hygiene of children and adolescents	The intermediate certification includes: - summarizing the theoretical material; - testing in the Moodle hygiene system for children and adolescents; - checking the assimilation of practical hygiene skills for children and adolescents; - solving situational tasks and hygiene exercises for children and adolescents;	UK -1: ID 1.1, 1.2, 1.3 UK-4: ID 4.2 UK-6: ID 6.1, 6.3 OPK-2: ID 2.1, 2.2, 2.3, 2.6 OPK-10: ID 10.2, 10,3 OPK-11: ID 11.1, 11.2, 11.4	Front-end survey, solving situational tasks, working on a practical assignment, and testing in the Moodle system.	2

8	Semester assessment session	The intermediate certification includes: - assessment of knowledge of theoretical material; - testing in the Moodle system; - checking the assimilation of practical skills and abilities; solving situational tasks and exercises.	UK -1: ID 1.1, 1.2, 1.3 UK-4: ID 4.2 UK-6: ID 6.1, 6.3 OPK-2: ID 2.1, 2.2, 2.3, 2.6 OPK-10: ID 10.2, 10,3 OPK-11: ID 11.1, 11.2, 11.4	Interview, solving problems and exercises, testing in the Moodle system	2
Total hours in 5 semesters:					**16**
Total hours					**84**

2.4 Interactive forms of training

Interactive forms of classes

No. p/p	Topic of the practical class	Workload intensity in hours	Interactive form of education	Workload intensity in hours, in % of the practical class
1	2	3	4	5
1.	The role and place of hygiene in the system of medical sciences.	3,4 hours	Interactive survey. Computer simulations.	20 minutes (0.44 hours) / 12.5%
2.	Hygienic requirements for the placement and planning of medical and preventive institutions of various profiles.	3,4 hours	Interactive survey. Mutual review of conspectums.	20 minutes (0.44 hours) / 12.5%
3.	Hygienic assessment of the microclimate (temperature and humidity regime in the hospital premises).	3,4 hours	Brainstorming session. Mutual review of conspectums.	20 minutes (0.44 hours) / 12.5%
4.	Hygienic assessment of air quality in the hospital.	3,4 hours	Interactive survey. Mutual review of abstracts.	20 minutes (0.44 hours) / 12.5%
5.	Hygienic assessment of natural lighting in rooms.	3,4 hours	Brainstorming session. Protection of creative work.	20 minutes (0.44 hours) / 12.5%
6.	Hygienic assessment of artificial lighting in hospital premises.	3,4 hours	Interactive survey. Computer simulations.	20 minutes (0.44 hours) / 12.5%
7.	Ensuring radiation safety in the hospital.	3,4 hours	The small group method.	20 minutes (0.44 hours) / 12.5%
8.	Prevention of nosocomial infection.	3,4 hours	Brainstorming session. Mutual review of conspectums.	20 minutes (0.44 hours) / 12.5%
9.	Sanitary and hygienic examination of the hospital department.	3,4 hours	Brainstorming session. Protection of creative work.	20 minutes (0.44 hours) / 12.5%
10.	The final lesson on the design of therapeutic and preventive institutions.	3,4 hours	Brainstorming session. Protection of creative work.	20 minutes (0.44 hours) / 12.5%
11.	Hygienic assessment of food quality.	3,4 hours	Interactive survey. Mutual review of conspectums.	20 minutes (0.44 hours) / 12.5%
12.	Hygienic assessment of the adequacy of nutrition of the population.	3,4 hours	Interactive survey. Computer simulations.	20 minutes (0.44 hours) / 12.5%
13.	Prevention of microbial food poisoning. The main causes	3,4 hours	Interactive survey. Mutual review of	20 minutes (0.44 hours) / 12.5%

	and preventive measures.		conspectums.	
14.	Prevention of food poisoning of non-microbial nature.	3,4 hours	Brainstorming session. Mutual review of conspectums.	20 minutes (0.44 hours) / 12.5%
15.	Organization of sanitary and hygienic control over the nutrition of troops in the field	3,4 hours	Interactive survey. Mutual review of conspectums.	20 minutes (0.44 hours) / 12.5%
16.	The final lesson on food hygiene.	3,4 hours	Brainstorming session. Protection of creative work.	20 minutes (0.44 hours) / 12.5%
17.	Hygiene of water supply in populated areas. Hygiene of water supply for troops.	2,6 hours	Interactive survey. Mutual review of conspectums.	20 minutes (0.44 hours) / 12.5%
18.	Physiological and hygienic aspects of industrial work. Hygienic assessment of meteorological factors in production.	2,6 hours	Interactive survey. Mutual review of conspectums.	20 minutes (0.44 hours) / 12.5%
19.	Hygienic characteristics of physical and chemical factors in production.	2,6 hours	Interactive survey. Mutual review of conspectums.	20 minutes (0.44 hours) / 12.5%
20.	Occupational hygiene in the military. The final lesson on occupational hygiene.	2,6 hours	Brainstorming session. Mutual review of conspectums.	20 minutes (0.44 hours) / 12.5%
21.	Sanitary and hygienic provision of preschool and school institutions.	2,6 hours	Interactive survey. Mutual review of conspectums.	20 minutes (0.44 hours) / 12.5%
22.	Hygiene of the educational process.	2,6 hours	Brainstorming session. Mutual review of conspectums.	20 minutes (0.44 hours) / 12.5%
23.	Assessment of physical development of children and adolescents.	2,6 hours	Interactive survey. Mutual review of conspectums.	20 minutes (0.44 hours) / 12.5%
24.	The final lesson on the hygiene of children and adolescents.	2,6 hours	Interactive survey. Mutual review of conspectums.	20 minutes (0.44 hours) / 12.5%

2.5 Criteria for assessment of students' knowledge

The assessment of acquired knowledge is carried out in accordance with the Regulations on the system for assessing the educational results of students of the Federal State Budgetary Educational Institution of Higher Education Amur State Medical Academy of the Ministry of Health of the Russian Federation.

The basis for determining the level of knowledge, skills, and abilities are the assessment criteria - completeness and correctness:

- correct, precise answer;
- correct but incomplete or imprecise answer

- incorrect answer; no answer.

When assigning marks, the classification of errors and their quality are taken into account:

- gross errors;
- similar errors;
- minor errors; shortcomings.

The success of students in mastering the topics of the discipline «Physics, Mathematics» is determined by the quality of mastering knowledge, skills and practical abilities; the assessment is given on a five-point scale: "5" - excellent, "4" - good, "3" - satisfactory, "2" - unsatisfactory.

Evaluation criteria

Quality of development	Mark on a 5-point scale
90 - 100%	**"5"**
80 - 89%	**"4"**
70 - 79%	**"3"**
less than 70%	**"2"**

Entrance control

Conducted at the first lesson, includes: solving problems and exercises; testing in the Moodle system https://educ-amursma.ru/enrol/index.php?id=528. Test control includes questions on the physics course studied in secondary (complete) general education institutions.

Current control

Current control includes initial and final control of knowledge.

Initial control **is** carried out by the teacher at the beginning of each class in the form of a frontal interview, solving problems and exercises.

Final control – includes control over the technique of performing the experiment and fulfillment of the protocol, written test by the variants, testing in the Moodle system https://educ-amursma.ru/enrol/index.php?id=528.

The final grade during the current knowledge assessment is given on the day of the practical class, as the arithmetic mean result for all types of activities provided for in the given class of the discipline's educational program.

Criteria for assessing the oral answer

- **«5» (excellent)** – the student demonstrates deep and complete knowledge of the educational material, does not allow inaccuracies or distortions of facts when presenting, delivers the material in a logical sequence, is well oriented in the presented material, and can provide justification for the judgments expressed.
- **«4» (good)** - the student has mastered the educational material in full, is well oriented in the educational material, presents the material in a logical sequence, but makes inaccuracies when answering.
- **«3» (satisfactory)** – the student has mastered the basic principles of the topic of the practical lesson, but when presenting the educational material, he/she makes inaccuracies, presents it incompletely and inconsistently, requires leading questions from the teacher to present it, and has difficulty substantiating the judgments expressed.
- **«2» (unsatisfactory)** – the student has fragmented and unsystematic knowledge of the educational material, is unable to distinguish between the main and the secondary, makes mistakes in defining basic concepts, distorts their meaning, and cannot independently present the material.

Assessment criteria for the practical part

- **«5» (excellent)** – the student has fully mastered the practical skills and abilities provided for by the course educational program.
- **«4» (good)** – the student has fully mastered the practical skills and abilities provided for the course program, but makes some inaccuracies.
- **«3» (satisfactory)** – the student has only some practical skills and abilities.
- **«2» (unsatisfactory)** – the student demonstrates the performance of practical skills and abilities with gross errors.

Criteria for assessing independent extracurricular work:

- the level of mastering the educational material by a student;
- the completeness and depth of general educational concepts, knowledge and skills on the topic being studied, to which this independent work relates;
- development of universal and general professional competencies (ability to apply theoretical knowledge in practice).
- the problems were solved correctly, the exercises were completed, and the test assignments were answered accurately – "passed".
- Problems were not solved correctly, exercises were not completed correctly, test assignments were not answered accurately – "failed".

Criteria for assessing a term paper:

- ***«5» (excellent)*** – is awarded to the student if they have prepared a complete, detailed, properly formatted term paper on the chosen topic, presented their work in the form of a report with computer presentation, and answered questions related to the report's subject matter;
- ***«4» (good)*** – is given to the student for a full, detailed, correctly formatted term paper that was poorly presented;
- ***«3» (satisfactory)*** – indicates that the term paper contains incomplete information about the studied issue, has formatting errors, and was poorly presented;
- ***«2» (unsatisfactory)*** – is assigned when the term paper has not been written or contains gross mistakes, the report and computer presentation were not prepared, or their content does not correspond to the topic of the term paper.

Making up missed assignments:

1. If a student misses a class due to valid reasons, they are entitled to make it up and receive the maximum grade provided by the discipline's curriculum for this particular session. The valid reason must be documented.
2. If a student skips a class without valid reasons or receives a mark of «2» for all activities during the class, then they must make it up. In such cases, the final mark obtained from these activities will be multiplied by 0.8.
3. If a student is excused from attending a class upon representation by the dean's office (participation in sports, cultural events, etc.), then they will receive a mark of «5» for this session provided they submit a report confirming completion of mandatory extracurricular independent study on the topic covered during the missed session.

Criteria for intermediate assessment evaluation.

Intermediate Assessment (Exam in Semester 5)

The intermediate assessment is designed to evaluate the extent to which planned learning outcomes have been achieved at the end of studying the course and allows an estimation of its level and quality as mastered by students.

Students' success in acquiring the discipline is evaluated using a five-point grading system: «5» — excellent, «4» — good, «3» — satisfactory, «2» — unsatisfactory.

Grading Criteria

- **Excellent («5»):** Awarded for deep and comprehensive mastery of educational material where the student demonstrates ease of orientation within it, connects theoretical knowledge with practical applications, expresses and substantiates personal opinions, presents answers clearly and logically; allows no more than 10% incorrect responses in testing. Practical skills and competencies specified in the working program of the discipline are fully acquired.

- **Good («4»):** Indicates that the student has comprehensively mastered the educational material, can navigate through it, provides coherent explanations but may contain some inaccuracies in content and form; allows up to 20% incorrect responses in testing. Acquires all practical skills and competencies outlined in the working program but with minor inconsistencies.

- **Satisfactory («3»):** Demonstrates partial acquisition of key concepts and understanding of basic principles of the educational material but explains them inadequately, inconsistently, and lacks the ability to express and justify judgments; allows up to 30% incorrect responses in testing. Possesses only limited practical skills and competencies.

- **Unsatisfactory («2»):** Signifies fragmentary and disorganized knowledge of the educational material, inability to distinguish between main points and secondary issues, makes mistakes in defining terms, distorts their meaning, presents the material disorderly and uncertainly; allows over 30% incorrect responses in testing. Performs practical skills and competencies with significant errors.

A student may automatically qualify for an “Excellent” grade if they achieve a prize-winning place in disciplinary or interdisciplinary Olympiads (university-level or regional) and maintain an average score of current academic performance of at least 4.8 points. However, the student may opt out of automatic grading and take the exam along with the group under standard conditions.

Intermediate assessment is conducted through a credit submission process divided into three stages:

1. Testing via the Moodle system:
Access mode: https://educ-amursma.ru/enrol/index.php?id=528
2. Full implementation of the practical component of the discipline: involves attendance at all practical classes, conducting experiments with proper documentation. Based on grades received for ongoing control of knowledge, skills, and abilities during practical sessions, a mean score of current academic performance is calculated and recorded in the teaching journal (electronic version). This mean score is taken into account during intermediate assessment.
3. Submission of practical skills (assessment of competence formation level). Includes ten options, each containing ten practical-oriented questions.

Assessment criteria for the intermediate assessment (5th semester)

Stages	**A mark on a 5-point scale**	**The point system**
Test control in the "Moodle" system	3-5	**5 – "excellent"** **4 – "good"** **3 –"satisfactory"**
Full implementation of the practical part of the discipline	3-5	
Transfer of practical skills (control of competence formation)	3-5	

Test control in the "Moodle" system	2	**2- "unsatisfactory"**
Full implementation of the practical part of the discipline	2	
Transfer of practical skills (control of competence formation)	2	

2.6 Independent work of students: classroom and extracurricular work.

The organization of students' classroom independent work is carried out with the help of methodological guidelines for students, which contain educational goals, a list of basic theoretical questions to study, a list of practical works and methods for conducting them, instructions on the design of the results obtained, their discussion and conclusions, tasks for self-control with response standards, a list of recommended literature.

From 1/4 to 1/2 of the practical lesson time is allocated for students' independent work: conducting research, recording results, discussing them, formulating conclusions, and completing individual assignments. The preparatory stage, or the formation of an indicative basis for action, begins with students during extracurricular time in preparation for a practical lesson, and ends in class.

All subsequent steps are carried out in the classroom. The stage of materialized actions (solving problems using an algorithm or without an algorithm, with an unknown answer in advance) is carried out independently. If necessary, the teacher conducts consultations, provides assistance, and at the same time monitors the quality of students' knowledge and their ability to apply existing knowledge to solve assigned tasks.

No. p/p	**Topic of practical class**	**Time for student to prepare for the class**	**Forms of extracurricular independent work**	
			Mandatory and uniform for all students	**A student's choice (report on a topic)**
4th semester				
1	The role and place of hygiene in the system of medical sciences	3 hours	Reading a text (textbook, lecture, additional literature), solving tests	Drafting a report on the topic
2	Hygienic assessment of hospital planning	3 hours	Reading a text (textbook, lecture, additional literature); solving tests	Drafting a report on the topic

3	Hygienic assessment of the temperature and humidity regime in the hospital premises.	3 hours	Reading a text (textbook, lecture, additional literature); solving tests	Preparation of communication for the seminar (1. Problems of fatigue 2. Theory of paralysis), preparation of a synopsis on the topic
4	Hygienic assessment of air cleanliness in the hospital	3 hours	Reading a text (textbook, lecture, additional literature); doing written homework; taking tests	Drafting a report on the topic
5	Hygienic assessment of natural light conditions in the hospital	3 hours	Reading a text (textbook, lecture, additional literature); solving tests	Drafting a report on the topic
6	Hygienic assessment of the artificial light regime in the hospital	3 hours	Reading a text (textbook, lecture, additional literature); doing written homework; taking tests	Drafting a report on the topic
7	Ensuring radiation safety in the hospital	3 hours	Reading a text (textbook, lecture, additional literature); doing written homework; taking tests	Drafting a report on the topic
8	Prevention of nosocomial infection	3 hours	Reading a text (textbook, lecture, additional literature); solving tests, watching a movie on the department's Moodle page	Preparation of communication skills for the classroom (1. Motor activity of the child. 2. Formation of the regulation in the ontogeny), making a synopsis on the topic
9	Sanitary and hygienic supervision of the hospital department	3 hours	Reading a text (textbook, lecture, additional literature); solving tests, doing written homework.	Preparation of messages for speaking in class (1. Regulation of blood calcium levels. 2. Regulation of blood glucose levels), video presentations, study of tables on the department's Moodle page; Preparation of a summary on the topic

10	Final lesson on hospital hygiene	3 hours	Reading a text (textbook, lecture, additional literature); solving tests	Drafting a report on the topic, viewing the material on the department's Moodle page
11	Hygienic assessment of food quality	3 hours	Reading a text (textbook, lecture, additional literature); solving tests, watching a movie on the department's Moodle page	Making a summary on the topic
12	Hygienic assessment of the adequacy of nutrition of the population	3 hours	Reading a text (textbook, lecture, additional literature); solving tests, watching a movie on the department's Moodle page	Performing written homework
13	Prevention of microbial food poisoning	3 hours	Reading a text (textbook, lecture, additional literature); solving tests, watching a movie on the department's Moodle page	Making a summary on the topic
14	Prevention of non-microbial food poisoning	3 hours	Reading a text (textbook, lecture, additional literature); solving tests	Drafting a report on the topic, preparing a report for presentation at the seminar (1. Leadership is an honorable duty of a citizen. 2. Artificial blood)
15	Hygiene of nutrition of troops in the field	3 hours	Reading a text (textbook, lecture, additional literature); solving tests	Making a summary on the topic
16	Final lesson on food hygiene	3 hours	Reading a text (textbook, lecture, additional literature); solving tests; doing written homework	Making a summary on the topic
Total labor intensity (4th semester)		**48**		

5th semester.

No. p/p	**The topic of the practical lesson**	**Time to prepare the student for the lesson**	**Forms of extracurricular independent work of the student**	
			Mandatory and the same for all students	**By student's choice**
5th semester				
1	Hygiene of water supply in popu-	0,7 hours	Reading a text (text-	Drafting a report on

	lated areas.		book, lecture, additional literature), solving tests	the topic
2	Hygiene of water supply for troops.	0,7 hours	Reading a text (textbook, lecture, additional literature); solving tests	Drafting a report on the topic
3	Soil as an environmental factor, hygienic soil analysis.	0,5 hours	Reading a text (textbook, lecture, additional literature); solving tests	Preparation of a presentation for the seminar (1. Problems of fatigue 2. Theory of parabiosis), preparation of a summary on the topic
4	Physiological and hygienic aspects of the production process.	0,9 hours	Reading a text (textbook, lecture, additional literature); completing written homework; solving tasks	Drafting a report on the topic
5	Hygienic assessment of meteorological factors in production.	0,7 hours	Reading a text (textbook, lecture, additional literature); solving tests	Drafting a report on the topic
6	Hygienic assessment of physical factors of production.	0,7 hours	Reading a text (textbook, lecture, additional literature); completing written homework; solving tasks	Drafting a report on the topic
7	Hygienic assessment of chemical factors of production.	0,7 hours	Reading a text (textbook, lecture, additional literature); completing written homework; solving tasks	Drafting a report on the topic
8	Occupational hygiene in the military.	0.5 hours	Reading a text (textbook, lecture, additional literature); solving tests, watching a movie on the department's Moodle page	Preparation of messages for speaking in class (1. The child's motor activity. 2. The formation of regulation in ontogenesis), making a summary on the topic
9	The final lesson on occupational health.	0,9 hours	Reading a text (textbook, lecture, additional literature); solving tests, completing written homework.	Preparation of messages for speaking at the lesson (1. Regulation of calcium levels in the blood. 2. Regulation of blood glucose levels), video presen-

				tations, study of tables on the Moodle page of the department; Preparation of a summary on the topic
10	Sanitary and hygienic provision of preschool institutions.	0,7 hours	Reading the text (textbook, lecture, additional literature); taking tests	Drafting a report on the topic, viewing the material on the department's Moodle page
11	Sanitary and hygienic provision of school institutions.	0,7 hours	Reading a text (textbook, lecture, additional literature); solving tests, watching a movie on the department's Moodle page	Drafting a report on the topic
12	Hygienic assessment of children's readiness for learning.	0,7 hours	Reading a text (textbook, lecture, additional literature); solving tests, watching a movie on the department's Moodle page	Doing written homework
13	Hygiene of the educational process.	0,5 hours	Reading a text (textbook, lecture, additional literature, solving tests	Drafting a report on the topic
14	Assessment of physical development of children and adolescents.	0,9 hours	Reading a text (textbook, lecture, additional literature, solving tests	Drafting a report on the topic, preparing a message for presentation at the seminar (1. Donation is an honorable duty of a citizen. 2. Artificial blood)
15	The final lesson on hygiene of children and adolescents.	0,9 hours	Reading a text (textbook, lecture, additional literature, solving tests	Drafting a report on the topic
16	Hygienic principles of personal hygiene, hygiene of clothes and shoes.	0,5 hours	Reading a text (textbook, lecture, additional literature); taking tests; doing written homework	Drafting a report on the topic
17.	Hygienic basics of emergency situations and medical disasters.	0,7 hours	Reading a text (textbook, lecture, additional literature, solving tests	Drafting a report on the topic
Total labor intensity (5th semester)			**12**	
Total:			**60**	

2.7 Scientific research (project) work

The research (project) work of students is a mandatory part of the study of the discipline and is aimed at the comprehensive formation of universal and general professional competencies of students. Research (project) work involves the study of specialized literature and other scientific and technical information on the achievements of domestic and foreign science and technology in the relevant field of knowledge, participation in scientific research, etc.

The topic can be chosen by the students themselves after consultation with the teacher, or from the list below (taking into account the scientific direction of the department):

1. Computer and health.
2. Bad habits and health.
3. Prevention of cold exposure.
4. Adaptogenic substances for the correction of various types of stress.

The results of the work are reported at:

- meeting of the circle on normal physiology;
- the final student conference of the Academy;
- tudent conferences in foreign languages.

The criterion for evaluating the research (project) work of students:

- the material on the research results in the report is presented in detail, the special literature is well developed, scientific and technical information on the achievements of domestic and foreign science and technology in the relevant field of knowledge is studied - "credited".
- the material on the research results in the report is not presented correctly enough, the specialized literature is poorly developed, scientific and technical information on the achievements of domestic and foreign science and technology in the relevant field of knowledge is studied - "not counted".

3. EDUCATIONAL, METHODOLOGICAL, LOGISTICAL AND INFORMATION SUPPORT OF THE DISCIPLINE

3.1. Main Literature

1. Pivovarov Yu.P. Hygiene and Fundamentals of Human Ecology. Textbook – Moscow: Publishing Center "Akademiya" – 528 p. – 2010 – 127 copies.
2. Kuchma V.R. Children and Adolescent Hygiene. Textbook – Moscow: Medicine – 384 p. – 2012 – 67 copies.
3. Pivovarov Yu.P. Laboratory Manual on Hygiene and Foundations of Human Ecology. Study Guide – Moscow: Publishing Center "Akademiya" – 512 p. – 2011 – 50 copies.
4. Hygiene: Textbook / Ed. by P.I. Mel'nichenko. – Moscow: GEOTAR-Media, 2014. – 656 p.: ill. Access mode: http://www.studmedlib.ru/ru/book/ISBN9785970430835.html
5. Bolshakov A.M. General Hygiene: Textbook. Edition 3rd, revised and supplemented – Moscow: GEOTAR-Media, 2016. – 432 p.: ill. Access mode: http://www.studmedlib.ru/ru/book/ISBN9785970436875.html

3.2. Additional Literature

1. Arkhangelsky V.N. Practical Training Manual on Military Hygiene. Study Guide – Moscow: GEOTAR-Media – 432 p. – 2012.
2. Bolshakov A.M. General Hygiene. Study Guide – St. Petersburg: GEOTAR-Media – 736 p. – 2010.
3. Hygiene with Basics of Human Ecology. Textbook. (Ed. by P.I. Mel'nichenko) – Moscow: GEOTAR-Media – 752 p. – 2010.
4. Ivanov V.P. General and Medical Ecology. Textbook. Rostov-on-Don: Feniks – 508 p. – 2010.
5. Ilin L.A. Radiation Hygiene. Textbook – Moscow: GEOTAR-Media – 384 p. – 2010.
6. Kicha D.I. General Hygiene. Laboratory Work Manual. Study Guide – Moscow: GEOTAR-Media – 288

p. – 2011.
7. Korolev A.A. Nutrition Hygiene. Textbook for Students – Moscow: Publishing Center "Akademiya" – 528 p. – 2012.
8. Medical Ecology. Study Guide – Moscow: Publishing Center "Akademiya" – 192 p. – 2012.
9. Children and Adolescent Hygiene: Practical Training Manual. Study Guide. (Ed. by V.R. Kuchma) – Moscow: GEOTAR-Media – 560 p. – 2010.
10. Kuchma V.R. Children and Adolescent Hygiene. Textbook – Moscow: GEOTAR-Media – 480 p. – 2010.
11. Arkhangelsky V.I., Mel'nichenko P.I. Hygiene. Compendium: Study Guide. – Moscow: GEOTAR-Media, 2012. – 392 p.: ill. Access mode: http://www.studmedlib.ru/ru/book/ISBN9785970420423.html
12. Kicha D.I., Drozhzhina N.A., Fomina A.V. General Hygiene. Laboratory Work Manual: Study Guide. – Moscow: GEOTAR-Media, 2015. – 288 p.: ill. Access mode: http://www.studmedlib.ru/ru/book/ISBN9785970434307.html
13. Hygiene with Basics of Human Ecology: Textbook / Ed. by P.I. Mel'nichenko. – Moscow: GEOTAR-Media, 2013. – 752 p.: ill. Access mode: http://www.studmedlib.ru/ru/book/ISBN9785970426425.html
14. Izmerov N.F., Kirillov V.F. Labor Hygiene: Textbook. Edition 2nd, revised and supplemented – Moscow: GEOTAR-Media, 2016. – 480 p.: ill. Access mode: http://www.studmedlib.ru/ru/book/ISBN9785970436912.html

3.3. Educational and Methodological Support Developed by Department Staff:

1. Nevmyvako E.E., Korshunova N.V. Teaching and Methodological Recommendations for Amur State Medical Academy Students. "Use of Adaptogenic Products Under Various Temperature Effects on the Body". Blagoveshchensk, 2011.
2. Korshunova N.V. Course Lectures on Hygiene. Study Guide. Blagoveshchensk, 2013.
3. Dolgopolov A.S. Feeding Infants Up to One Year Old. Study Guide. Blagoveshchensk, 2013.
4. Korshunova N.V. et al. Computer and Health. Study Guide. Blagoveshchensk, 2013.
5. Korshunova N.V., Litovchenko E.A., Slobodenyuk E.V. Use of Plant-Based Adaptogens to Correct High and Low Temperature Impacts. Guidelines for Students. Blagoveshchensk, 2018.
6. Korshunova N.V., Litovchenko E.A., Slobodenyuk E.V. Application of Phytadaptogens to Alleviate Thermal Stress. Guidelines for Researchers and Postgraduates. Blagoveshchensk, 2018.

Electronic and Digital Technologies:

1. Online Course on Hygiene Discipline in the Electronic Information-Educational System of FSBEI HE Amur State Medical Academy
Access Mode: https://educ-amursma.ru/enrol/index.php?id=528

Characteristics of the modules in the electronic information and educational course

Educational	Controlling
Theoretical (lecture) material, video experiments, scientific, educational and educational films	Methodological recommendations for students on extracurricular independent work.
Methodological recommendations for students for practical classes. Methodological recommendations for solving problems and exercises on discipline topics.	The list of recommended topics of the abstract papers and the regulations for the design of the abstract.
Reference material, tables of standard values.	Tests of the entrance, current and final knowledge controls.

1. Multimedia presentations (Microsoft Power Point 2016), for classes of the lecture type, according to the thematic lecture plan.

3.4 Equipment used for the educational process

No. p/p	Name	quantity
1.	**Practical training room: DC - 1**	
	Board	1
	The teacher's desk	1
	The training table	4
	Computer desk	13
	Computers	13
	A set of hygiene devices	1
	Chairs	15
	A set of handouts	26
2.	**Practical training room: DC - 2**	
	Board	1
	The teacher's desk	1
	The training table	4
	Computer desk	13
	Computers	13
	A set of hygiene devices	15
	Chairs	26
3.	**Practical training room: DC - 3**	1
	Board	1
	The teacher's desk	1
	The training table	7
	Computer desk	13
	Computers	1
	A set of hygiene devices	13
	Chairs	15
	A set of handouts	26

3.5. Professional databases, information and reference systems, electronic educational resources.

Name of the resource	Resource description	Access	Resource address
Electronic library systems			
"Student's Consultant" Electronic Library of Medical University.	For students and teachers of medical and pharmaceutical universities. Provides access to electronic versions of textbooks, teaching aids, and periodicals.	library, individual access	http: //www.studmedlib.ru/
"Doctor's consultant" Electronic medical library.	The materials posted in the library were developed by leading Russian specialists based on modern scientific knowledge (evidence-based medi-	library, individual access	http://www.rosmedlib.ru /cgi-bin/mb4x

	cine). The information has been prepared taking into account the position of the scientific and practical medical society (world, European and Russian) in the relevant specialty. All materials have undergone mandatory independent review.		
PubMed	A free search engine in the largest medical bibliographic database MedLine. Documents medical and biological articles from the specialized literature, as well as provides links to full-text articles.	library, free access	http://www.ncbi.nlm.nigov/pubmed/
Oxford Medicine Online.	The Oxford Publishing House's collection of publications on medical subjects, combining over 350 publications into a common resource with the possibility of cross-search. Publications include The Oxford Handbook of Clinical Medicine and The Oxford Textbook of Medical Medicine, the electronic versions of which are constantly updated.	library, free access	http://www.oxfordmedicine.com
Knowledge base on human biology	Background information on physiology, cell biology, genetics, biochemistry, immunology, and pathology. (Resource of the Institute of Molecular Genetics of the Russian Academy of Sciences.)	library, free access	http://humbio.ru/
Online Medical Library	Free reference books, encyclopedias, books, monographs, abstracts, English-language literature, tests.	library, free access	http://med-lib.ru/
Information systems			
Russian Medical Association	Professional Internet resource. Purpose: to promote the effective professional activities of medical staff. It contains the charter, personnel, structure, rules of entry, and information about the Russian Medical Union.	library, free access	http://www.rmass.ru/
Web medicine	The site is a catalog of professional medical resources, including links to the most reputable thematic sites, journals, societies, as well as useful documents and programs. The website is intended for doctors, students, staff of medical universities and scientific institutions.	library, free access	http: //webmed.irkutsk.ru/
Databases			

World Health Organization	The website contains news, statistical data on countries belonging to the World Health Organization, newsletters, reports, WHO publications and much more.	library, free access	http://www.who.int/ru/
Ministry of Science and Higher Education of the Russian Federation	The website of the Ministry of Science and Higher Education of the Russian Federation contains news, newsletters, reports, publications and much more.	library, free access	http://www.minobrnauki.gov.ru
Ministry of Education of the Russian Federation.	The website of the Ministry of Education of the Russian Federation contains news, information bulletins, reports, publications, and much more.	library, free access	https://edu.gov.ru/
Federal portal "Russian Education"	A single window of access to educational resources. This portal provides access to textbooks on all branches of medicine and healthcare.	library, free access	http: //www .edu.ru/ http://window.edu.ru/catalog/?p rubr=2.2.81.1
Bibliographic databases			
B D "Russian medicine"	It has been created in the CNMB and covers the entire fund since 1988. The database contains bibliographic descriptions of articles from domestic journals and collections, dissertations and their abstracts, as well as domestic and foreign books, collections of proceedings of institutes, conference materials, etc. Thematically, the database covers all areas of medicine and related fields of biology, biophysics, biochemistry, psychology, etc.	library, free access	http://www.scsml.rssi.ru/
eLIBRARY.RU	The Russian information portal in the field of science, technology, medicine and education, containing abstracts and full texts of more than 13 million scientific articles and publications. On the eLibrary platform.Electronic versions of more than 2,000 Russian scientific and technical journals are available, including more than 1,000 open access journals.	library, free access	http://elibrary.ru/defaultx.asp
Portal Electronic library of dissertations	Currently, the Electronic Library of Dissertations of the Russian State Library of Economics contains more than 919,000 complete texts of dissertations and abstracts.	library, free access	http://diss.rsl.ru/?menu=disscatalog/
Medline.ru	A medical and biological portal for specialists. Biomedical Journal. Last updated on February 7, 2021	library, free access	http://www.medline.ru

3.6. Licensed and freely distributed software used in the educational process.

I. I. Commercial software products		
1.	The operating system MS Windows 7 Pro	License number 48381779
2.	The operating system MS Windows 10 Pro, MS Office	Contract №142 A от 25.12.2019
3.	MS Office	License number: 43234783, 67810502, 67580703, 64399692, 62795141, 61350919
4.	Kaspersky Endpoint Security for Business Advanced	Contract № 977 по/20 от 24.12.2020
5.	1C: University PROF.	LICENSE AGREEMENT № 2191 от 15.10.2020
6.	1C: PROF Library	LICENSE AGREEMENT № 2281 от 11.11.2020
II. Freely distributed software		
1.	Google Chrome	Distributed for free Distribution conditions: https://play.google.com/about/play-terms/index.html
2.	The Yandex Browser	Distributed for free License agreement for the use of Yandex Browser programs https://yandex.ru/legal/browser_agreement/
3.	Dr.Web CureIt!	Distributed for free Distribution conditions: https://st.drweb.com/static/new-www/files/license_CureIt_ru.pdf
4.	OpenOffice	Distributed for free License: http://www.gnu.org/copyleft/lesser.html
5.	LibreOffice	Distributed for free License: https://ru.libreoffice.org/about-us/license/

3.7. Resources of the Internet information and telecommunication network

- Library of the Amur State Museum of Fine Arts. Access mode: https://amursma.ru/obuchenie/biblioteki/biblioteka-amurskoy-gma/
- EBS "Student Consultant". Access mode: http://www.studmedlib.ru/cgi-bin/mb4x
- Electronic library of medical literature. Access mode: https://www.books-up.ru/ru/entrance/97977feab00ecfbf9e15ca660ec129c0/

4. FUND OF APPRAISAL FUNDS

4.1. Current test control (input, initial, output), final.

4.1.1 Examples of entrance control test tasks (with response standards)

The test tasks are located in the "Moodle" system.
Access mode: https://educ-amursma.ru/enrol/index.php?id=528
The total number of tests is 100.

1. THE PLACEMENT OF FUNCTIONAL UNITS OF THE HOSPITAL IN ONE BUILDING IS CALLED:
1)Centralized type of building
2)A decentralized type of building
3)Mixed type of building
4)Block type of building

2. THE PLACEMENT OF FUNCTIONAL UNITS OF THE HOSPITAL IN SEPARATE BUILDINGS IS CALLED:
1)Centralized type of building
2)A decentralized type of building
3) Mixed type of building
4) Block type of building

3. SPECIFY THE AREA OF THE BUSINESS AREA OF THE HOSPITAL AREA:
1)15 %
2)10 %
3)60 %
4)30 %

Response standards: 1-1; 2-2; 3-3.

4.1.2 Examples of initial control test tasks (with response standards)

The test tasks are located in the "Moodle" system.
Access mode: https://educ-amursma.ru/enrol/index.php?id=528
The total number of tests is 200.

1. INDOOR MICROCLIMATE IS BEING FORMED:
1)Air temperature
2)Air humidity
3)Air movement
4)Room illumination

2.THE INDOOR AIR TEMPERATURE IS MEASURED:
1) A psychrometer
2)By catathermometer
3)Hygrometer
4)With an anemometer

3.AIR HUMIDITY IS MEASURED:
1)Hygrometer
2)By catathermometer
3) Stationary psychrometer of August
4)Assman aspiration psychrometer

Response standards: 1-4, 2-3, 3-1,

4.1.3 Examples of border control test tasks (with response standards)

The test tasks are located in the "Moodle" system.
Access mode: https://educ-amursma.ru/enrol/index.php?id=528
The total number of tests is 200.

1.SPECIFY THE HYGIENIC STANDARD OF RELATIVE HUMIDITY IN THE HOSPITAL ROOM:
1)40 - 60 %
2)20 - 40 %
3)60 - 80 %
4)30 - 40 %

2.THE AIR VELOCITY IN THE ROOM IS MEASURED:
1)By catathermometer
2)A psychrometer
3)Actinometer
4)With a winged anemometer

3.THE SPEED OF AIR MOVEMENT IN AN OPEN AREA IS MEASURED:
1)Cup anemometer
2)By catathermometer
3)The Psychrometer of August
4)Actinometer

Response standards: 1-3, 2-2, 3-3,

4.1.4 Examples of final control test tasks (with response standards)

The test tasks are located in the "Moodle" system.
Access mode: https://educ-amursma.ru/enrol/index.php?id=528
The total number of tests is 200.

1.SPECIFY THE HYGIENIC STANDARD OF AIR VELOCITY
IN THE HOSPITAL ROOM:
1)0.15 - 0.25 m/sec
2)0.07 - 0.14 m/sec
3)0.26 - 0.30 m/sec
4)0.03 - 0.12 m/sec

2.THE AIR TEMPERATURE AFFECTS THE HEAT TRANSFER
THE BODY BY:
1)Convection
2)Evaporation
3)Radiation
4)conduction

3.THE SPEED OF AIR MOVEMENT HAS AN EFFECT ON HEAT TRANSFER
THE BODY BY:
1)Convection

2)Radiation
3)Acquisitions
4)conduction

Response standards: 1-2, 2-1, 3-3,

4.2 Situational tasks and exercises

Task 1.
Citizen D. bought salads made from meat salted in pork intestines. The meat was salted in barrels and consumed toasted, in addition, salads and a cake were consumed. This meat was stored for 4 days on the balcony at a temperature of - 24 ° C. A day later, people had weakness in their legs, double vision, abdominal pain, vomiting. Then there was nystagmus dysarthria, dry mouth, decreased pharyngeal symptoms. The patient died. What is the diagnosis? Staph poisoning? Botulism?
The standard answer is Botulism, because the causative agent of botulism is resistant to the action of the temperature factor.

Task 2.
Citizen A. ate a cupcake with whipped cream at a restaurant for dinner. After 5 hours, vomiting, profuse diarrhea, and heart pain appeared. Staph poisoning? Botulism?
The standard answer is Staphylococcal poisoning, as Staphylococcus is often found in dairy products.

Task 3.

Citizen D. bought salads made from meat salted in pork intestines. The meat was salted in barrels and consumed toasted, in addition, salads and a cake were consumed. This meat was stored for 4 days on the balcony at a temperature of - 24 ° C. A day later, people had weakness in their legs, double vision, abdominal pain, vomiting. Then there was nystagmus dysarthria, dry mouth, decreased pharyngeal symptoms. The patient died. What is the diagnosis? Staph poisoning? Botulism?
The standard answer is Botulism, because the causative agent of botulism is resistant to the action of the temperature factor.

4.3 A list of practical skills that a student should possess after mastering the discipline.

1. Study of the microclimate of residential public and industrial premises.
2. Assessment of natural and artificial lighting of hospital, educational and industrial premises.
3. Determination of the chemical composition of the air by the express method.
4. Inspection of the water source and establishment of water quality.
5. Disinfection (chlorination) of water for household drinking water supply and sanitation of the well.
6. Conducting a sanitary and hygienic examination of the quality of drinking water, individual nutrition, and food products, followed by a conclusion on their suitability for consumption.
7. Preparation of the layout menu, assessment of its nutritional value.
8. Investigation of cases of food poisoning and preparation of relevant documentation.
9. Sanitary and hygienic examination:
- food store;
- a hospital site in a medical and preventive institution:

- school site, school premises and school equipment;
- a workplace in the workshop of an industrial institution.
- Assessment of the conditions of stay of patients in hospitals of various types and organization of hygienic measures for the prevention of nosocomial infections.
10. Evaluation of the radiation protection system in case of contact with radioactive substances and sources of radioactive radiation.
11. Assessment of physical development, condition, degree of maturity of children and adolescents using standard methods.
12. Assessment of the daily routine and educational conditions of children and adolescents.
13. Assessment of the sanitary condition of the food department of children's institutions.
14. Determination of the bio-dose of ultraviolet radiation necessary for the prevention of ultraviolet insufficiency in children.
15. Assessment of the functional state of the central nervous system and mental functioning of the child.
16. Carrying out sanitary and educational work with the population on hygienic issues (hardening with water, air and sun; furniture selection, etc.)

4.4. List of exam questions

THE GENERAL PART

1. Environment - public health the current state of the problem.

2. The formation of scientific hygiene in Russia, and its development.

3. Biogeochemical endemias: concept, causes, types, prevention.

4. Climate: concept, types, impact on healthy and sick people. Acclimatization. Psychotropic diseases, prevention.

5. Hygiene and sanitation: concept, purpose, objectives, structure, research methods.

6. Modern problems of public health protection and ways to solve them.

7. Solar radiation and its hygienic significance,

8. Soil as a factor of environmental pollution and self-purification.

HOSPITAL HYGIENE

1. Ensuring radiation safety in the hospital when working with closed sources of ionizing radiation.

2. Hygienic requirements for the collection, storage and disposal of solid and liquid waste from medical institutions (uninfected, infected, radioactive).

3. Hygienic requirements for the selection and layout of a hospital site.

4. Hygienic requirements for the internal layout of the hospital department.

5. Hygienic requirements for the air regime in the hospital premises.

6. Hygienic requirements for the light regime in the hospital.

7. Nosocomial infection: concept, types, causes, prevention.

8. Ensuring radiation safety in the hospital when working with open sources of ionizing radiation.

FOOD HYGIENE

1. Nutrition as a health factor,

2. Quantitative and qualitative nutritional value. Physiological norms of nutrition.

3. Food toxicosis: concepts, types, causes of preventive measures.

4. Facial toxicoinfections: concept, types, causes, preventive measures.

5. Hygienic requirements for the maintenance of the hospital's food hall.

6. Hygienic characteristics of the nutritional biological value of food products of animal origin.

7. Hygienic characteristics of the nutritional and biological value of products of plant origin"

8. Food poisoning of non-microbial nature: concept, types, causes, preventive measures.

9. Diseases related to malnutrition: classification, manifestations, preventive measures.

OCCUPATIONAL HYGIENE

1. Industrial poisons: sources, types, routes of exposure, nature of harmful effects, preventive measures.

2. Hygienic characteristics of the working conditions of medical workers: specific and non-specific hazards, the nature of the effect on the body, protective measures.

3. Noise and vibration diseases in production: sources, nature of harmful effects, preventive measures.

4. Hygienic characteristics of working conditions in agriculture: occupational hazards, the nature of the effect on the body, protective measures.

5. Dust pathology in production: sources, ways of exposure, the nature of harmful effects, prevention.

6. The concept of "production environment", "occupational hazards", "occupational diseases", "nature of the labor process".

7. Hygienic characteristics of the work of workers in special conditions of the industrial microclimate: types of microclimate, the nature of harmful effects, protective measures.

8. Hygienic characteristics of the working conditions of workers with biological factors of production: types of professions, the nature of harmful effects, protective measures.

9. Occupational injuries: concept, causes, types, prevention.

10. A system of measures for the prevention of occupational diseases in the workplace.

HYGIENE OF CHILDREN AND ADOLESCENTS

1. Hygienic requirements for the maintenance of general education schools.

2. Hygienic requirements for the maintenance of preschool institutions.

3. Hygienic aspects of the content of the doctor's work in children's and adolescent groups"

4. Adaptation of children to the beginning of schooling, the concept of "school maturity".

5. Hygienic requirements for the organization of Physical education and tempering of children and adolescents.

6. Prevention of visual and posture disorders in schoolchildren.

HYGIENE OF WATER SUPPLY

1. Hygienic requirements for the quality of drinking water in centralized and decentralized water supply in populated areas.

2. The importance of water in human life. Hygienic characteristics of sources and types of water supply in populated areas.

3. Hygienic characteristics of methods and methods for improving the quality of drinking water in centralized and decentralized water supply in populated areas.

MILITARY HYGIENE AND DISASTER MEDICINE

1. Hygienic problems of medicine in extreme situations and disasters,

2. Sanitary and hygienic provision of troops. Forces and means, the volume of hygienic measures in the troops (company, battalion, regiment).

3. Features of water supply for troops in the field; Forces and means of deploying a left-hand water supply point.

4. Hygienic characteristics of methods of extraction, processing, storage and transportation of drinking water in the field.

5. Tasks of the medical service for sanitary supervision of water supply to troops in the field.

6. Features of nutrition of troops in the field. Forces and means of deployment of the battalion's food station.

7. Tasks of the medical service for sanitary supervision of the nutrition of troops in the field.

8. Examination of food and drinking water in the area of contamination by mass media.

9. Methods of decontamination, neutralization and disinfection of food and containers in the field.

10. Hygienic characteristics of the working conditions of armored troops: specific and non-specific hazards, the nature of the effect on the body, protective measures.

11. Hygienic characteristics of the working conditions of military personnel in artillery and rocket forces: specific and non-specific hazards, the nature of the effect on the body, protection measures.

12. Hygienic characteristics of the working conditions of military personnel in the radio engineering troops (radar station): specific and non-specific hazards, the nature of the effect on the body, protective measures.

APPROVED
at the meeting of the Department of General Hygiene
Protocol No. 16 dated 06/23/2021 by the head of

the Department Korshunova N.V.

ADDITIONS AND CHANGES TO THE WORK PROGRAM
IN THE DISCIPLINE OF "HYGIENE"
SPECIALTY 05/31/01 MEDICAL BUSINESS
FOR THE 2021-2022 ACADEMIC YEAR

In accordance with Order No. 1456 of the Ministry of Science and Higher Education of the Russian Federation dated 11/26/2020 "On Amendments to Federal Standards of Higher Education" (registered with the Ministry of Justice of Russia on 05/27/2021 No. 63650) and in connection with amendments to the basic professional educational program of higher education in the specialty 05/31/02 Pediatrics, the year of commencement preparation for 2021, approved by the Academic Council of the Amur State Medical Academy of the Ministry of Health of the Russian Federation dated 06/21/2021, Protocol No. 20 (put into effect by Decree No. 212P dated 06/25/2021), The following changes are being made to the work program of the discipline "Hygiene":

In the section of the work program 1.6 "Requirements for discipline development results" on page 9 in the table, amend the wording of the competence of OPK - 10.

OPK-10. He is able to solve standard tasks of professional activity using information, bibliographic resources, medical and biological terminology, information and communication technologies, taking into account the basic information security requirements for the formulation

OPK-10. He is able to understand the principles of modern information technologies and use them to solve professional tasks.

Supplement to the work program of the pediatric faculty in the discipline "Hygiene"

Specialty: 05/31/01 MEDICAL PRACTICE

for the 2022-2023 academic year

APPROVED

at the meeting of the Department of General Hygiene

Protocol No. 10 dated May 21, 2022.

Head of the department Korshunova N.V.

Item 3.5.2 has been changed in the program, the list of software (commercial software products) has been added

N. p/p	List of freely distributed software	Links to the license agreement
1.	The Yandex Browser	Distributed for free License agreement for the use of Yandex Browser programs https://yandex.ru/legal/browser_agreement/
2.	Yandex.Teleconference	Distributed for free Software License Agreement https://yandex.ru/legal/telemost_mobile_agreement/
3.	Dr.Web CureIt!	Distributed for free License Agreement: https://st.drweb.com/static/new-www/files/license_CureIt_ru.pdf
4.	OpenOffice	Distributed for free License: http://www.gnu.org/copyleft/lesser.html
5.	LibreOffice	Distributed for free License: https://ru.libreoffice.org/about-us/license/

List of freely distributed software

N. p/p	**List of software (commercial software products)**	**Details of supporting documents**
1	The operating system is MS Windows 7 Pro	License number 48381779
2	The operating system is MS Windows 10 Pro	Contract No. UT-368 dated 21.09.2021
3	MS Office	License number: 43234783, 67810502, 67580703, 64399692, 62795141, 61350919
4	Kaspersky Endpoint Security for Business is the Standard Russian Edition.	Contract No. 165A dated 25.11.2022
5	50-99 Node 2 year Educational Renewal License	LICENSE AGREEMENT 612/L dated 02.02.2022
6	1C Accounting and 1C Salary	LICENSE AGREEMENT No. CB-1151 dated 01.14.2022
7	1C: PROF Library	LICENSE AGREEMENT № 2281 dated 11.11.2020
8	Consultant Plus	Contract No. 37/C dated 25.02.2022

9	Contour.Tolk	Contract No. K007556/22 dated 19.09.2022
10	3KL e-learning Environment (Russian Moodle)	Contract No. 1362.3 dated 21.11.2022
11	Astra Linux Common Edition	Contract No. 142 A dated 21.09.2021
12	Information system "Plans"	Contract No. 9463 dated 25.05.2022
13	1C: Document management	Contract No. 2191 dated 15.10.2020
14	R7-Office	Contract No. 2 KS dated 18.12.2020

APPROVED

at the meeting of the Department of General Hygiene

Protocol No. 10 dated May 21, 2022.

Head of the department Korshunova N.V.

ADDITIONS AND CHANGES TO THE WORK PROGRAM IN THE DISCIPLINE OF "HYGIENE" SPECIALTY 05/31/01 MEDICAL BUSINESS FOR THE 2023-2024 ACADEMIC YEAR

1. Amend Article 9, update the table in the section "Licensed and freely distributed software used in the educational process."

List of software (commercial software products)

N. p/p	**List of software (commercial software products)**	**Details of supporting documents**
1	The operating system is MS Windows 7 Pro	License number 48381779
2	The operating system is MS Windows 10 Pro	Contract No. UT-368 dated 21.09.2021
3	MS Office	License number: 43234783, 67810502, 67580703, 64399692, 62795141, 61350919
4	Kaspersky Endpoint Security for Business is the Standard Russian Edition.	Contract No. 165A dated 25.11.2022
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8	Consultant Plus	Contract No. 37/C dated 25.02.2022
9	Contour.Tolk	Contract No. K007556/22 dated 19.09.2022
10	3KL e-learning Environment (Russian Moodle)	Contract No. 1362.3 dated 21.11.2022
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12	Information system "Plans"	Contract No. 9463 dated 25.05.2022
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14	R7-Office	Contract No. 2 KS dated 18.12.2020

List of freely distributed software

No. p / p	List of freely distributed software	Links to the license agreement
1	The Yandex Browser	Distributed for free License agreement for the use of Yandex Browser programs

		https://yandex.ru/legal/browser_agreement/
2	Yandex.Teleconference	Distributed for free Software License Agreement https://yandex.ru/legal/telemost_mobile_agreement/
3	Dr.Web CureIt!	Distributed for free License Agreement: https://st.drweb.com/static/new-www/files/license_CureIt_ru.pdf
4	OpenOffice	Distributed for free License: http://www.gnu.org/copyleft/lesser.html
5	LibreOffice	Distributed for free License: https://ru.libreoffice.org/about-us/license/
6	VK Calls	Distributed for free https://vk.com/licence

Item 2

2. In accordance with Order No. 208 of the Ministry of Science and Higher Education of the Russian Federation dated 02/27/2023 "On Amendments to the Federal State Educational Standards of Higher Education" and Amendments and Additions to the Basic Professional Educational program of higher education in the specialty 05/31/02 Pediatrics, approved by the Academic Council of the Amur State Medical Academy of the Ministry of Health of the Russian Federation dated 05/16/2023,-Tokol No. 15 introduces the following changes:

UC -11. Able to form an intolerant attitude towards corrupt behavior	**IAUC -11.1.** Knows and applies the current legislation in the field of anti-corruption activities. **IAUC -11.2.** He knows how to prevent corruption and forms an intolerant attitude towards it. **IAUC -11.3.** It prevents corruption risks in professional activities, and excludes interference in one's professional activities in cases of corruption offenses.

UC -11. He is able to form an intolerant attitude towards manifestations of extremism, terrorism, and corrupt behavior and resist them in his professional activities	**IAUC -11.1.** Defines and identifies the signs of crimes related to the manifestation of extremism, terrorism, and corruption, and cultivates intolerance towards their manifestation. **IAUC -11.2.** Knows the current legislation on countering extremism, terrorism, and corrupt behavior, and complies with the requirements in the field of their prevention. **IAUC -11.3.** Knows the regulatory documents for identifying and eliminating factors that contribute to the emergence and spread of the ideology of terrorism, extremism, and corrupt behavior in professional activities, and prevents interference in their professional activities in cases of inducement to unlawful acts. **IAUC -11.4.** Knows and understands the harm of extremism, terrorism, and corrupt behavior to the economic, socio-political, social spheres of society, and the national security of Russia