

**Thematic lesson plan of the seminar type
in the discipline "Hygiene"
for students in basic vocational education
specialist 's program
specialty 31.05.01 "General Medicine",
focus (profile) General Medicine y,
Full-time form of education
for 2023-2024 academic year**

№	Thematic blocks	Volume per semester, hours (acad.)
1	Hygienic evaluation of chemical and microbial pollution of air environment of living, educational, and medical locations (part 1). ¹ Hygiene of residential and public buildings. Hygienic characteristics of building and decoration materials. Requirements for ventilation. ²	2
	Hygienic evaluation of chemical and microbial pollution of air environment of living, educational, and medical locations (part 2). ¹ The main sources of indoor air pollution. Anthrotoxins. The role of polymeric materials. "Syndrome of a sick building." Noise as a factor in the human environment. Determination of the parameters of air exchange, lighting of the study room, hygienic assessment ²	1
2	Hygienic evaluation of isolation mode, natural and artificial lightening of living, educational, and medical premises (part 1). ¹ Hygienic requirements for the insolation of premises for various purposes. Factors affecting the level of natural light in rooms. Indices of natural lighting, methods of determination and rationing. ²	2
	Hygienic evaluation of isolation mode, natural and artificial lightening of living, educational, and medical premises (part 2). ¹ Hygienic requirements for artificial lighting. Characteristics of light sources, types of lamps. Definition and assessment of the parameters of natural and artificial lighting of the training room. ²	2
3	Hygienic evaluation of the indoor microclimate its effect on a person's heat exchange and health condition (часть 1). ¹ Physical properties of air and their importance for the body. Microclimate and its hygienic significance, types of microclimate. The effect of uncomfortable microclimate on heat transfer and human health. ²	2
	Hygienic evaluation of the indoor microclimate its effect on a person's heat exchange and health condition (part 2). ¹ Rationing of microclimate parameters of various rooms. Determination of microclimate parameters in the training room, hygienic assessment; influence on the thermal state of the student. ²	2
4	Hygienic evaluation of the quality of water (part 1). ¹ Hygienic requirements for the quality of drinking water with centralized and local water supply. Hygienic requirements for the construction and operation of mine wells and other local water supply facilities. ²	2
	Hygienic evaluation of the quality of water (part 1). ¹ Comparative characteristics of water supply sources. Sanitary-protection zones. ²	2
5	Methods of water purification (part 1). ¹ Comparative characteristics of water sources. Zones of sanitary protection of water sources.	2
6	Nutrition value and bioavailability of foodstuffs of animal and vegetable origin (part 1). ¹ Nutritional and biological value of the main groups of food products: cereals, vegetables and fruits. ²	2
	Nutrition value and bioavailability of foodstuffs of animal and vegetable origin (part 2). ¹ Nutritional and biological value of the main groups of food products: dairy, meat and fish. ²	2
7	Food quality assessment (part 1). ¹ Quality and food safety. Diseases transmitted to humans through food. ²	2

	Food quality assessment (part 2). ¹ Hygienic assessment of the organoleptic and physico-chemical properties of milk, bread. ²	2
8	Hygienic evaluation of nutrition. Nutrition-related diseases, their causes and prevention (part 1). ¹ Hygienic requirements for a rational nutrition of a person. Physiological nutritional standards of various population groups. ²	2
	Hygienic evaluation of nutrition. Nutrition-related diseases, their causes and prevention (part 2). ¹ Reasons and prevention of nutritional-dependent diseases: protein-energy deficiency, obesity, diabetes mellitus, etc. ²	2
9	Evaluation of individual macronutrient intakes and energy. (part 1). ¹ Features of a balanced diet of various population groups: children and adolescents, elderly people, people with mental labor, etc. Calculation of energy consumption in a time-varying way. ²	2
	Evaluation of individual macronutrient intakes and energy. (part 2). ¹ Creating a layout menu, calculating the daily intake of proteins, fats, carbohydrates and energy. ²	2
10	Evaluation of individual micronutrient intakes: vitamin, mineral and fiber food intakes (part 1). ¹ Vitamins, their sources, hygienic value. Vitaminosis, hypovitaminosis, hypervitaminosis, their causes, clinical manifestations, prevention. ²	2
	Evaluation of individual micronutrient intakes: vitamin, mineral and fiber food intakes (part 2). ¹ preparation of vitamin infusions. Determination of vitamin C content in vegetables. The value and sources of minerals in nutrition. ²	2
11	Assessment of a nutritional status, description of health risks, hygienic recommendations for the correcting actual nutrition (part 1). ¹ Assessment of the nutritional status of a medical student by somatometric, clinical and other indicators. ²	2
	Assessment of a nutritional status, description of health risks, hygienic recommendations for the correcting actual nutrition (part 2). ¹ Making recommendations on the correction of the student's actual nutrition. ²	2
12	Food poisoning prevention (part 1). Food poisoning and their classification. Food poisoning of microbial nature. Toxic infections of various etiologies. Botulism, staphylococcal toxicosis. Mycotoxicosis. ²	2
	Food poisoning prevention (part 2). ¹ Food poisoning of a non-microbial nature: foods poisonous in nature; temporarily poisonous foods; products containing chemicals in quantities exceeding the MPC. Prevention of food poisoning and infections. The role of the attending physician in the investigation of food poisoning and the organization of preventive measures. ²	2
13	Hygienic estimation of the accommodation, layout, living conditions in health establishments (part 1). ¹ Hygienic assessment of hospital construction systems, placement of a hospital site, percentage of landscaping, zoning of a site, internal layout of departments. ²	2
	Hygienic estimation of the accommodation, layout, living conditions in health establishments (part 2). ¹ Hygienic assessment of air exchange, microclimate, lighting, acoustic comfort in a hospital. ²	2
	Hygienic estimation of the accommodation, layout, living conditions in health establishments (part 3). ¹ The problem of nosocomial infections, sources, causes of spread, specific and nonspecific prevention of nosocomial infections. ²	2
14	Working environment factors. Prognosis of its effect on the health of the workers. Preventive measures (part 1). Industrial microclimate, noise, vibration rationing in the production environment, the impact on the body of workers, the prevention of occupational diseases. ²	2
	Working environment factors. Prognosis of its effect on the health of the workers. Preventive measures (part 2). Dust, toxic substances; rationing in the production environment, the impact on the body of workers, the prevention of	2

	occupational diseases. ²	
	Working environment factors. Prognosis of its effect on the health of the workers. Preventive measures1 (part 3). ¹ Assessment of student working conditions in the study room, recommendations. ²	2
15	The extent of strain and intensity of the working process. Their effect on the physical functions of the workers (part 1). ¹ Labor is mental and physical. Criteria for assessing extent of strain and intensity of the working process. ²	2
	The extent of strain and intensity of the working process. Their effect on the physical functions of the workers (part 2). ¹ Fatigue and overwork, prevention. Determining a student's ability to work at a fast forced pace. Role-playing game to assess the functional state of a person with heavy physical labor. ²	2
16	Health-care provision for employes industrial enterprises. ¹ Health care unit. Duties of doctors of the Health care unit. The content of order № 29n.Medical examinations of workers. Occupational diseases. (part 1).	2
	Health-care provision for employes industrial enterprises. ¹ Health care unit. Duties of doctors of the Health care unit. The content of order № 29n.Medical examinations of workers. Occupational diseases. (part 2).	2
17	Hygienic aspects of PC operator work. Medical and sanitary provision for industrial workers. ¹ The main adverse factors affecting workers when using personal computers. Prevention of professionally determined pathology of the organs of vision, musculoskeletal system, nervous system (part 1). ²	2
	Hygienic aspects of PC operator work. Medical and sanitary provision for industrial workers. ¹ The main adverse factors affecting workers when using personal computers. Prevention of professionally determined pathology of the organs of vision, musculoskeletal system, nervous system (part 1). (part 2).	2
18	Providing radiation safety of medical personnel. ¹ Open and closed sources of ionizing radiation in healthcare facilities, prevention of radiation sickness, radiation burns. ² (part 1).	2
	Providing radiation safety of medical personnel. ¹ Open and closed sources of ionizing radiation in healthcare facilities, prevention of radiation sickness, radiation burns. ² (part 2).	1
19	Physical development of children and adolescents. Methods of studying and evaluating physical development (part 1). ¹ Physical development of children and adolescents, concept. Factors affecting the health of children and adolescents. ²	2
	Physical development of children and adolescents. Methods of studying and evaluating physical development (part 2). ¹ Criteria and methods for assessing physical development.	2
	Physical development of children and adolescents. Methods of studying and evaluating physical development (part 3). ¹ Options for a conclusion on physical development. ²	2
20	Complex evaluation of health status of children; health groups, criteria for assigning children to health groups (part 1). ¹ Individual health indicators, medical classification of children's health, health groups of children and adolescents. ndividual health indicators, medical classification of children's health, health groups of children and adolescents. ²	2
	Complex evaluation of health status of children; health groups, criteria for assigning children to health groups (part 2). ¹ Technology for identifying health	2

	groups. 2 Family history, compilation of the genealogy sheet, calculation of the burden index of the hereditary history. Definition of children's health groups. ²	
21	School maturity. Determination of a child's readiness for schooling. ¹ School maturity as a complex medical and psychological problem. Functional maturity. Leading risk criteria for school immaturity. Psychophysiological and medical criteria of school maturity. Stages of examination of the child. ² (part 2).	2
	School maturity. Determination of a child's readiness for schooling. ¹ School maturity as a complex medical and psychological problem. Functional maturity. Leading risk criteria for school immaturity. Psychophysiological and medical criteria of school maturity. Stages of examination of the child. ² (part 1).	2
22	Hygienic issues of physical education at school. ¹ Physical education, notion, forms of physical education. ²	2
	Hygienic issues of physical education at school. (part 2). ¹ Principles of physical education ²	2
23	Formation of healthy lifestyle of a person (part 1) ¹ Health, healthy lifestyle: concepts, content. Factors determining health. Blocks of a healthy lifestyle. The role of the doctor in the formation of healthy lifestyle. ²	2
	Formation of healthy lifestyle of a person (part 2) ¹ Hardening, principles, indications and contraindications; hardening methods. ²	2
24	Final lesson: discussion of the results of the rating assessment of students' knowledge in the discipline	2
	Total	96

1 - topic

2 - essential content

Considered at the meeting of the department of General hygiene and ecology IPH may, 24, 2023, protocol No 9.

Head of the Department



N.I. Latyshevskaya

