

**Thematic plan of seminar-type classes
in discipline «Hygiene»
for students of 2023 year of admission
under the educational programm
31.05.03 Dentistry,
specialisation (profile) Dentistry,
(Specialist's),
form of study full-time
for the 2025-2026 academic year**

№	Thematic blocks	Practical training within thematic block ¹	Hours (academic)
5 семестр			
	Hygienic assessment of chemical and microbial pollution of the air environment of residential, educational, medical premises. Hygiene of residential and public buildings. Hygienic characteristics of building and finishing materials. Requirements for ventilation of premises. The main sources of air pollution in closed spaces. Anthrotoxins. The role of polymeric materials. "Sick building syndrome". Noise as a factor in the human habitat. Part 1.	PT	2
1	Hygienic assessment of chemical and microbial pollution of the air environment of residential, educational, medical premises. Determination of air exchange parameters of a classroom, hygienic assessment. Determination and assessment of the parameters of natural and artificial lighting of a classroom. Determination of microclimate parameters in a classroom, hygienic assessment, impact on heat exchange. Preparation of recommendations for correction of the parameters of the internal environment of a classroom. Part 2.	PT	2
2	Hygienic requirements for insolation of premises for various purposes. Factors affecting the level of natural lighting of premises. Indicators of natural lighting, methods of determination and standardization. Hygienic requirements for artificial lighting of premises. Characteristics of light sources, types of lamps.	PT	2
3	Physical properties of air and their importance for the body. Microclimate and its hygienic importance, types of microclimate. Effect of uncomfortable microclimate on heat exchange and human health. Standardization of microclimate parameters of various premises.	PT	2
4	Hygienic assessment of the quality of drinking water and water supply sources. Methods for improving water quality. The importance of fluorine in the prevention of endemic fluorosis and caries. Hygienic requirements for the quality of drinking water in centralized and local water supplies. Hygienic requirements for the construction and operation of shaft wells and other local water supply structures. The importance of fluorine in the prevention of endemic fluorosis and caries. Basic methods of drinking water purification.	-	2
5	Food and biological value of food products of animal and plant origin; importance in the prevention of dental diseases. Hygienic assessment of the quality of food products. Food and biological value of the main groups of food products: cereals, dairy, fish, vegetables and fruits. Quality and safety of food products. Diseases transmitted to humans through food products. Hygienic assessment of organoleptic and physicochemical properties of milk, bread.	PT	2

6	Assessment of the adequacy of individual nutrition. Alimentary-dependent diseases, causes, prevention. Hygienic recommendations for the correction of actual nutrition. Alimentary-dependent diseases, concept, classification. Healthy nutrition, concept, principles of healthy nutrition. Principles of standardization of nutrition of various population groups differentiated by the level of physical activity, norms of physiological needs for energy and nutrients. Calculation of energy expenditure by the chronometric method.	-	2
7	Assessment of the adequacy of individual nutrition by macronutrient composition. The biological role of proteins, fats, carbohydrates, standardization, sources in nutrition. Diet, concept, significance.	-	2
8	Vitamins and minerals, their biological role, standardization and sources in nutrition. Significance in the prevention of dental diseases. Assessment of the adequacy of individual nutrition by micronutrients: vitamins, minerals and dietary fiber. Vitamins, their sources in nutrition, hygienic significance. Vitamin deficiencies, hypovitaminoses, hypervitaminoses, their causes, clinical manifestations, prevention. The importance and sources of minerals and dietary fiber in nutrition.	-	2
9	Nutritional status: concept, classification. Indicators used to assess nutritional status. Determining the nutritional status of a medical student based on indicators characterizing nutritional status. Comprehensive assessment of the actual nutrition of a medical student, filling out the table.	-	2
10	Prevention of food poisoning. Food poisoning and its classification. Microbial food poisoning. Toxic infections of various etiologies. Botulism, staphylococcal toxicosis. Mycotoxicoses. Non-microbial food poisoning: products that are poisonous by nature; products that are temporarily poisonous; products containing chemicals in quantities exceeding the MAC. Prevention of food poisoning and infections. The role of a doctor in investigating food poisoning and organizing preventive measures.	-	2
11	Hygienic requirements for the placement of hospitals and the layout of the hospital site. Hospital development systems. Hygienic requirements for the layout of the ward section. Air exchange, microclimate, lighting, acoustic conditions, finishing, and color interior of LPO premises. Hygienic aspects of the prevention of nosocomial infections.	-	2
12	Hygienic assessment of the placement, layout, and internal environment of dental clinics. Hygienic requirements for the layout and equipment of dental clinics. Air exchange, microclimate, lighting, acoustic conditions, finishing, color interior, cleaning regime for the premises of a dental clinic, waste disposal. Hygienic aspects of the prevention of nosocomial infections in dental clinics. Personal hygiene, personal protective equipment for a dentist.	-	2
13	Factors of the production environment; forecast of the impact on the health of workers; preventive measures. Hygienic classification and criteria for assessing working conditions based on indicators of harmfulness and danger of production environment factors. Production microclimate, noise, vibration, industrial dust, industrial chemicals; standardization, impact on the health of workers, prevention of occupational diseases. Harmful and hazardous production factors in the work of a dentist, forecast of the impact on the health of workers; preventive measures.	-	2
14	The severity and intensity of the work process; impact on the functional state and health of workers. Mental and physical labor. Criteria for assessing the severity and intensity of the work process. Fatigue and overfatigue, prevention. Physiological and hygienic characteristics of the conditions and regime of work of dentists and dental technicians.	PT	2
15	Medical and sanitary support for workers at industrial enterprises. Organization and procedure for conducting preliminary medical examinations upon admission to work and periodic medical examinations of workers in harmful and hazardous working conditions (preliminary and periodic medical	-	2

	examinations by a dentist).		
16	Comprehensive assessment of the health status of children and adolescents; criteria and health groups. Physical development of children and adolescents as an indicator of health; research and assessment methods. Methods for studying and assessing the physical development of children and adolescents. Assessment of the level of biological development. Assessment of the physical development of children and adolescents according to regional standards. Health groups of children and adolescents, criteria, technology for determining health groups.	PT	2
17	Formation of a healthy lifestyle of a person.1 Health, healthy lifestyle: concepts, content, importance for maintaining health and active longevity. Components of a healthy lifestyle. Assessment of the daily routine, physical activity of students. Oral hygiene.2	-	2
Total			36

¹ – one thematic block includes several lessons, the duration of one lesson is 45 minutes, with a break between lessons of at least 5 minutes

Considered at the meeting of the Department of General Hygiene and Ecology of the Institute of Public Health named after N.P. Grigorenko "23" May 2025, protocol No. 10

Head of the Department



N.I. Latyshevskaya