

**Thematic lesson plan of the seminar type  
in the discipline "Hygiene"  
for students in basic vocational education  
specialist 's program  
specialty 31.05.03 Dentistry,  
focus (profile) Dentistry  
full-time education  
for the 2023-2024 academic year**

| № | Thematic blocks   | Hours<br>(academic) |
|---|---|---------------------|
| 1 | Hygienic assessment of chemical and microbial air pollution of residential, educational, and medical premises.1 Hygiene of residential and public buildings. Hygienic characteristics of building and finishing materials. Requirements for ventilation of premises. The main sources of indoor air pollution. Anthropotoxins. The role of polymer materials. "Sick building syndrome". Noise as a factor of human habitat. Determination of the parameters of air exchange, lighting of the study room, hygienic assessment.2  | 2                   |
| 2 | Physical properties of air and their significance for the body.1 Microclimate and its hygienic significance, types of microclimate. The effect of an uncomfortable microclimate on heat exchange and human health. Normalization of microclimate parameters of various rooms. Determination of microclimate parameters in the study room, hygienic assessment; influence on the thermal state of the student.2  | 2                   |
| 3 | Hygienic requirements for the insolation of premises for various purposes.1 Factors affecting the level of natural lighting of premises. Indicators of natural light, methods of determination and rationing. Hygienic requirements for artificial lighting of premises. Characteristics of light sources, types of lamps. Determination and evaluation of the parameters of natural and artificial lighting of the study room. Preparation of recommendations for correction of illumination.2   | 2                   |
| 4 | Hygienic assessment of the quality of drinking water and water supply sources. Methods for improving water quality. The importance of fluoride in the prevention of endemic fluorosis and caries.1 Hygienic requirements for the quality of drinking water in centralized and local water supply. Hygienic requirements for the installation and operation of mine wells and other local water supply facilities. The importance of fluoride in the prevention of endemic fluorosis and caries. Basic methods of drinking water purification. Determination of the suitability of a chlorine-containing preparation for disinfection of water, determination of the chlorine demand of water, control of disinfection of tap water by residual chlorine.2 Part 1. | 2                   |
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| 5 | Nutritional and biological value of animal and vegetable food products; importance in the prevention of dental diseases. Hygienic assessment of food quality.1 Nutritional and biological value of the main food groups of cereals, dairy, fish, vegetables and fruits. Food quality and safety. Diseases transmitted to humans through food. Hygienic assessment of organoleptic and physico-chemical properties of milk, bread.2 Part 1.  | 2                   |
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|    | fruits. Food quality and safety. Diseases transmitted to humans through food. Hygienic assessment of organoleptic and physico-chemical properties of milk, bread.2 Part 2   |   |
| 6  | Hygienic assessment of nutritional value. Alimentary-dependent diseases. 1 Principles of food rationing. Energy balance. Calculation of energy consumption in a timekeeping way. Classification of alimentary-dependent diseases2.  | 2 |
| 7  | Assessment of the adequacy of individual nutrition by macronutrient composition and energy. Hygienic recommendations for the correction of actual nutrition.1 Features of rational nutrition of various population groups: children and adolescents, the elderly, people of intellectual labor, etc. Preparation of the layout menu, calculation of daily intake of proteins, fats, carbohydrates and energy. Assessment of the diet. Assessment of the nutritional status of a medical student by somatometric, clinical and other indicators. Making recommendations for correcting the actual nutrition of the student.2 | 2 |
| 8  | Assessment of the adequacy of individual nutrition by micronutrients: vitamins, minerals and dietary fibers. Hygienic recommendations for the correction of actual nutrition.1 Vitamins and minerals, their biological role, rationing and sources in nutrition; importance in the prevention of dental diseases. Vitamin deficiency, hypovitaminosis, hypervitaminosis, their causes, clinical manifestations, prevention. Preparation of vitamin infusions. Determination of vitamin C content in veggies2. Part 1.   | 2 |
|    | Vitamins and minerals, their biological role, rationing and sources in nutrition; importance in the prevention of dental diseases.1 The importance and sources of minerals and dietary fiber in nutrition. Making recommendations for correcting the actual nutrition of the student.2 Part 2.  | 2 |
| 9  | Assessment of the nutrition status. 1 Assessment of the nutritional status of a medical student by somatometric, clinical and other indicators. Making recommendations for correcting the actual nutrition of the student.2   | 2 |
| 10 | Prevention of food poisoning.1 Food poisoning and their classification. Food poisoning of microbial nature. Toxicoinfections of various etiologies. Botulism, staphylococcal toxicosis. Mycotoxicosis. Food poisoning of non-microbial nature: products that are poisonous by nature; products that are temporarily poisonous; 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 Part 1.   | 2 |
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| 11 | Hygienic assessment of the placement, layout, internal environment of medical and preventive organizations (dental departments of hospitals). Prevention of nosocomial infections.1 Hygienic requirements for the placement of hospitals and the layout of the hospital site. Hospital building systems. Hygienic requirements for the layout of the ward section. Air exchange, microclimate, lighting, acoustic mode, decoration, color interior of LPO premises. Hygienic aspects of prevention of nosocomial infections.2 Part 1.   | 2 |
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|    | Part 2.   |   |
| 12 | Hygienic assessment of the placement, layout, and internal environment of dental clinics.1 Hygienic requirements for the layout and equipment of dental clinics. Air exchange, microclimate, lighting, acoustic mode, decoration, color interior, cleaning mode of dental clinic premises, waste disposal. Hygienic aspects of prevention of nosocomial infection in dental clinics . Personal hygiene, personal protective equipment of a dentist 2  | 2 |
| 13 | Factors of the production environment; forecast of the impact on the health of workers; preventive measures.1 Hygienic classification and criteria for assessing working conditions according to the indicators of harmfulness and danger of factors of the production environment. Industrial microclimate, noise, vibration, industrial dust, industrial chemicals; rationing, impact on the health of workers, prevention of occupational diseases.2 Part 1  | 2 |
|    | Factors of the production environment; forecast of the impact on the health of workers; preventive measures.1 Hygienic classification and criteria for assessing working conditions according to the indicators of harmfulness and danger of factors of the production environment. Industrial microclimate, noise, vibration, industrial dust, industrial chemicals; rationing, impact on the health of workers, prevention of occupational diseases. Harmful and dangerous production factors in the work of a dentist, the forecast of the impact on the health of workers; preventive measures. 2 Part 2. | 2 |
| 14 | The severity and intensity of the labor process; the impact on the functional state and health of workers.1 Mental and physical labor. Criteria for assessing the severity and intensity of the labor process. Fatigue and overwork, prevention. Determination of the 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 Part 1.   | 2 |
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| 15 | Hygienic assessment of chemical and microbial air pollution of residential, educational, and medical premises.1 Hygiene of residential and public buildings. Hygienic characteristics of building and finishing materials. Requirements for ventilation of premises. The main sources of indoor air pollution. Anthrotoxins. The role of polymer materials. "Sick building syndrome". Noise as a factor of human habitat. Determination of the parameters of air exchange, lighting of the study room, hygienic assessment.2  | 2 |
| 16 | Physical properties of air and their significance for the body.1 Microclimate and its hygienic significance, types of microclimate. The effect of an uncomfortable microclimate on heat exchange and human health. Normalization of microclimate parameters of various rooms. Determination of microclimate parameters in the study room, hygienic assessment; influence on the thermal state of the student.2  | 2 |
| 17 | Hygienic requirements for the insolation of premises for various purposes.1 Factors affecting the level of natural lighting of premises. Indicators of natural light, methods of determination and rationing. Hygienic requirements for artificial lighting of premises. Characteristics of light sources, types of lamps. Determination and evaluation of the parameters of natural and artificial lighting of the study room. Preparation of recommendations for correction of illumination.2   | 2 |
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|    | water purification. Determination of the suitability of a chlorine-containing preparation for disinfection of water, determination of the chlorine demand of water, control of disinfection of tap water by residual chlorine.2 Part 1.   |    |
| 18 | Hygienic assessment of the quality of drinking water and water supply sources. Methods for improving water quality. The importance of fluoride in the prevention of endemic fluorosis and caries.1 Hygienic requirements for the quality of drinking water in centralized and local water supply. Hygienic requirements for the installation and operation of mine wells and other local water supply facilities. The importance of fluoride in the prevention of endemic fluorosis and caries. Basic methods of drinking water purification. Determination of the suitability of a chlorine-containing preparation for disinfection of water, determination of the chlorine demand of water, control of disinfection of tap water by residual chlorine.2 Part 2. | 2  |
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<sup>1</sup> - topic

<sup>2</sup> - 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