ASSESSMENT FUND

Course Outline «Hygiene»

Level of higher education

SPECIALIST

Academic Curriculum 560001 – KR General
(code and name of the training area)
General Medicine

2024

The assessment materials are designed to assess the knowledge of students majoring in "General Medicine" in the course "Hygiene."

The assessment materials were reviewed and approved at a meeting of the department.

Hygiene

Minutes № _2_from "_28_" _August_2024 year

Head of Department

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A list of competencies, indicating the stages of their development in the process of mastering the discipline/practice

Competencies being developed	Planned learning outcomes for the discipline, characterizing the stages of competence development	Types of assessment tools/section code in this document GPC 1: content of competence
GPC -2	**<u>Know:</u>** The causes, conditions, and development of diseases, as well as the elimination of harmful factors affecting human health; - Organizing a range of activities aimed at maintaining and improving health and eliminating harmful factors; - A range of activities aimed at maintaining and improving health, developing a healthy lifestyle, and the factors affecting human health.	**Block A: Reproductive-Level Tasks** Questions, tests, problem solving, preparing written homework, preparing a presentation, tests, exams
	<u>Be able to</u> Identify the harmful effects of environmental factors on human health; Prevent the emergence and/or spread of diseases, their early diagnosis, and their causes; Eliminate the causes of the emergence and spread of diseases.	**Block B - tasks of the reconstructive level** 1. Presentations, independent work with educational, scientific, and regulatorydocumentation, problem solving, midterm assessment (5th semester), exam (test). 2. 2. Borsokbaeva S.S., Kasymova R.O., Kudayarova M.Zh., Azhimatova M.R., Textbook. General hygiene. ISBN 978-9967-19-633-9. 471 p. 2019 3. Azhimatova M.R., Kudayarova M.Zh.

		Hygienic Assessment of the Air Environment and Environmental Protection. A teaching aid. Bishkek: KRSU, 2020. 95 p. et al.
	<u>Possess:</u> A set of measures to promote a healthy lifestyle; - Comprehensive measures aimed at maintaining and improving health and developing a healthy lifestyle; - A set of measures aimed at developing a healthy lifestyle, maintaining and improving health, and preventing disease.	**Block C** consists of practice-oriented and/or research-based assignments. Presentations, discussion facilitation, midterm assessment (5th semester), exam (test) 1. Borsokbaeva S.S., Kasymova R.O., Kudayarova M.Zh., Azhimatova M.R., Textbook. General hygiene. ISBN 978-9967-19-633-9. 471 p. 2019 2. Azhimatova M.R., Kudayarova M.Zh. Hygienic assessment of the air environment and environmental protection. Academic met. village 2020. 95 s etc.
Competencies being developed	Planned learning outcomes for the discipline, characterizing the stages of competence development	Types of assessment tools/section code in this document GPC-1: content of competence
PC2	**Know:** Fundamentals of sanitary and hygienic measures aimed at strengthening human health. - Features of the influence of abiotic environmental factors on human health (solar radiation) , temperature, humidity, air velocity,air pressure, soil and water quality and safety). – Population health	**Block A –** Reproductive Level Tasks Questions, tests, problem solving, preparing written homework, preparing a presentation, tests, exam(test)

	indicators, factors shaping human health, and the impact of occupational, natural, climatic, and endemic factors on human health.	
	<u>Be able to</u>: - Use hygienic and immunological measures to improve public health. - Establish cause-and-effect relationships between changes in health and environmental factors. - Educate patients and their families on basic hygienic and immunological measures for health promotion (organizing a balanced diet, maintaining a work-rest schedule, reducing weather-related illnesses through hardening, etc.).	**Block B** − Reconstructive-Level Assignments Presentations, independent work with educational, scientific, and regulatory documentation, problem solving, midterm assessment (5th semester), exam (test) 1. Borsokbaeva S.S., Kasymova R.O., Kudayarova M.Zh., Azhimatova M.R., General Hygiene Textbook. ISBN 978-9967-19-633-9. 471 pages. 2019. 2. Azhimatova M.R., Rudayarova M.Zh. Hygienic Assessment of the Air Environment and Environmental Protection. Study Guide. Bishkek: KRSU, 2020. 95 pages. et al.
	Possess: Theoretical knowledge in all areas of hygiene and immunology. - Practical skills in primary prevention of occupational diseases of individuals in various fields of activity. - Prevention of cardiovascular, pulmonary, and oncological diseases, digestive system disorders, and meteorological conditions, as well as	Block C − practice-oriented and/or research-based assignments. Presentations, discussion facilitation, midterm assessment (5th semester), exam (test) 1. Borsokbaeva S.S., Kasymova R.O., Kudayarova M.Zh., Azhimatova M.R., Textbook. General Hygiene. ISBN 978-9967-19-633-9. 471 pages. 2019. 2. Azhimatova M.R., Kudayarova M.Zh., Hygienic

	preventive measures to increase the body's resistance to adverse environmental factors.	Assessment of the Air Environment and Environmental Protection. Uch.met. pos. 2020. 95 pages. 3. etc..
PC 3	Know: Causes, conditions and development of diseases, as well as the elimination of harmful factors affecting human health .	Block A: Reproductive-Level Tasks Questions, tests, problem solving, preparing written homework, preparing a presentation, tests, exams
	Skills: Identify the harmful effects of environmental factors on human health. - Prevent the occurrence and/or spread of diseases, their early diagnosis, and their causes. - Eliminate the causes of the occurrence and spread of diseases. - Conduct educational activities to eliminate risk factors and promote healthy lifestyle skills. Diagnosis of diseases and pathological conditions of patients; emergency conditions; pregnancy diagnosis .	Block B − Reconstructive-Level Assignments Presentations, independent work with educational, scientific, and regulatory documentation, problem solving, midterm assessment (5th semester) exem(test) 1. Borsokbaeva S.S., Kasymova R.O., Kudayarova M.Zh., Azhimatova M.R., Textbook. General Hygiene. ISBN 978-9967-19-633-9. 471 pages. 2019. 1. Azhimatova M.R., Kudayarova M.Zh. Hygienic Assessment of the Air Environment and Environmental Protection. Study Guide. Bishkek: KRSU, 2020. 95 pages. et al.
	Possess: Skills for developing a healthy lifestyle and comprehensive measures aimed at maintaining and improving health. - Skills in educational activities to develop healthy lifestyle habits.	Block C − practice-oriented and/or research-based assignments. Presentations, discussion facilitation, midterm assessment (5th semester), exam (test) 1. Borsokbaeva S.S., Kasymova R.O., Kudayarova M.Zh., Azhimatova M.R.,

		Textbook. General Hygiene. ISBN 978-9967-19-633-9. 471 pages. 2019. 2. Azhimatova M.R., Kudayarova M.Zh., Hygienic Assessment of the Air Environment and Environmental Protection. Uch.met. pos. 2020. 95 pages. 3. et al.

Section 2.

Technological map of discipline/practice

TECHNOLOGICAL MAP OF DISCIPLINE/PRACTICE

Course _3__, Semester _5___, CU - _4___, Reporting - _____

Discipline "HYGIENE"
Area/specialization LD
Course/Semester 5
Credit units (CU) 4

Title of module according to WDP	**Type of control**	**Forms of control**	**Minimal Credit points**	**Maximal Credit points**	**Week of control**
Module 1					
Module 1. Hygiene of atmospheric air, water, soil	Formative assessment	Activity, attendance, discussion of situational tasks	5	10	4
	Midterm examination	Evaluation test	5	10	
Module 2					
Module 2. Nutritional hygiene	Formative assessment	Activity, attendance, discussion of situational tasks	5	10	10
	Midterm examination	Report with presentation or abstract	5	10	

		(optional)			
Module3					
Module 3. Hospital hygiene. Occupational hygiene and physiology.	Formative assessment	Activity, attendance, discussion of situational tasks	5	5	16
	Midterm examination	Evaluation test	5	10	
Module 4					
Module 4. Hygiene of children and adolescents	Formative assessment	Activity, attendance, discussion of situational tasks	5	5	17
	Midterm examination	Evaluation test	5	10	
Total			40	70	
Midpoint assessment			20	30	
Summative assessment			60	100	

A module is a logically complete part of a course.

Ongoing assessment: the student's independent work, attendance, and participation in classes.
Boundary assessment: checking the completeness of knowledge and skills in the module as a whole.
Interim assessment: a completed, documented part of a course a collection of closely related modules.

Section3

Standard assessment tasks and other materials necessary for assessing planned learning outcomes in a discipline/practice (assessment tools). Description of indicators and competency assessment criteria, description of assessment scales.

Block A

1. Classification of methods of hygienic research - methods:
1. Sanitary description, chemical
2. Study of environmental factors
3. Study of the influence of environmental factors on the body
4. Sanitary
2. The environment is understood as:
1. A complex of external environmental factors
2. Social elements of the environment
3. Socioeconomic factors
4. The environment of human production activity
3. Hygiene is the science that studies:
1. The influence of environmental factors and social conditions on the human body
2. Chemical composition
3. Health
4. On the preservation and improvement of public health
4. The founders of Russian medicine at the end of the 19th century were active supporters of the preventive approach in medicine and considered hygiene to be the most important branch of medical knowledge:
1. N.A. Semashko, Z.P. Soloviev, G.V. Khlopin
2. N.I. Pirogov
3. Hippocrates, Avicenna
4. S.P. Botkin
5. Ecology is a science
1. About the interaction of the human body with the environment
2. Protection of soil, water, and air
3. About the harmonious development of the body
4. About the relationship of flora and fauna with the environment

Environmental factors are divided into three large groups:
1. Abiotic, biotic, anthropogenic
2. Endogenous, radioactive, natural
3. Complex, background, mixed
4. Chemical, physical, biological

7. Urbanization is:
1. Population migration from villages to cities
2. A global process transforming cities
3. The process of industrial concentration in cities
4. Increase in the population in cities

8. Primary prevention is:
1. Prevention of the impact of harmful factors on health
2. Sanitary supervision
3. Medical examination
4. Disease prevention in healthy people

9. Secondary prevention is:

1. Disease prevention
2. Sanitary supervision
3. Sanitary and hygienic measures in healthcare facilities
4. Preventive measures among sick people
10. The basis for the regulation of harmful substances is:
1. The threshold principle
2. Biological effect on organism
3. Physicochemical properties of bodies
4. Concentration of harmful substances in the air
11. Natural lighting of premises depends on:
1. Area of premises, room depth
2. Orientation of the building and windows, building height, number and area of windows
3. Time of day, season, weather
4. Interior, geographic latitude
12. For hygienic assessment of the level of natural lighting in a room, the following indicators are used:
1. KEO - opening angle, angle of incidence, luminous coefficient /SK
2. KEO, microclimatic conditions, window orientation according to cardinal points
3. Specific power, W/m2
4. Deepening coefficient, distance between buildings, insolation
13. Artificial illumination is determined by:
1. Luxmeter, "watt" calculation method
2. Rheometer
3. Geometric method
4. Ammeter
14. Artificial lighting systems include:
1. Type of light sources
2. Incandescent electric lamps, Fluorescent
3. Fluorescent light sources
4. General, local, combined
15. Types of luminaires:
1. Direct, reflected, and diffused light
2. Incandescent lamps, fluorescent
3. Direct, indirect, combined
4. Frosted globes, lunette, incandescent lamps, sconces
16. Which lighting system is appropriate for use in operating rooms?
1. Combined
2. Gas discharge lamps
3. Incandescent lamps
4. Number and power of luminaires
17. Optimum relative humidity in rooms
3. 20-40%
4. 80-90%
1. 40-60%
2. 60-80%

18. The physical properties of air include
1. Temperature, humidity, and air mobility
2. Atmospheric pressure, solar radiation
3. Air ionization, electromagnetic fields of radio waves, air radioactivity
4. Mechanical impurities in air
19. Artificial lighting systems include:
1. Type of light sources
2. Incandescent electric lamps, Fluorescent
3. Fluorescent light sources
4. General, local, combined

The main biological effect of UV radiation is water-salt:
1. General stimulating
2. Bactericidal
3. Photochemical
4. Chemical

21. The following indicators are used to assess a person's thermal state:
1. Body and skin temperature
2. Pulse and respiratory rate, A/D
3. Sweating, subjective human sensations
4. Air and body temperature

22. What type of humidity can be determined with a hygrometer:
1. Relative
2. Maximum
3. All types of humidity
4. Dew point

23. The following instruments are needed to determine air humidity:
1. Hygrometer
2. Barometer
3. Krotov apparatus
4. Anemometer

24. Types of water supply:
1. Centralized, decentralized
2. Artesian
3. Tap
4. Spring

25. Interstratal waters are characterized by:
1. Low temperature, constant composition
2. Low flow rate
3. Good taste
4. Depth of occurrence of 10 m

26. Sanitary protection zones of water sources have the following zones:
1. Strict regime, restrictions
2. Non-hazardous
3. Hazardous
4. Safe, protective

27. Basic methods Water quality improvements:
1. Coagulation, sedimentation, filtration
2. Decolorization, disinfection
3. Desalination, fluoridation
4. Disinfection, clarification

28. Ultrasound for drinking water is used in:
1. Disinfection
2. Degassing
3. Coagulation
4. Preservation

29. Silver for drinking water is used in:
1. Disinfection
2. Coagulation
3. Deodorization
4. Decontamination

30. Ozone is used in drinking water for:
1. Disinfection
2. Coagulation
3. Softening
4. Degassing

31. Water clarification is:
1. Removal of colloidal substances from water
2. Precipitation of microbial lime

3. Elimination of odor and taste from water
4. Elimination of water color
32. Water decolorization means:
1. Removal of water color
2. Elimination of water turbidity
3. Removal of suspended particles from water
4. Removal of excess salts from water.
33. Aluminum sulfate for drinking water is used for:
1. Coagulation
2. Decontamination
3. Deodorization
4. Softening
34. Water chlorination is monitored based on:
1. Residual chlorine
2. Pathogenic microflora content
3. Microbial count
4. Organic matter content
35. Soil consists of:
1. Humus, humus
2. Living organisms and human waste products
3. Solid matter and waste
4. Solid and liquid phases
5. Gaseous and living phases
36. Soil self-purification includes the following processes:
1. Mineralization, humification
2. Leaching, absorption
3. Deamination, retention, filtration
4. Neutralization, hydrolysis
37. Soil wastewater treatment methods:
1. Irrigation fields, plowing
2. Waste incineration plants
3. Improved landfills
4. Filtration methods
38. The following infectious diseases are transmitted through soil:
1. Tetanus, gas gangrene, anthrax
2. Smallpox, glanders, paratyphoid fever, diphtheria
3. Chickenpox, ascariasis, hepatitis, plague
4. Dysentery, typhoid fever, leptospirosis
39. Assessment of physical development is important for:
1. General characteristics and assessment of individual health
2. Assessment of the effectiveness of therapeutic, preventive, and health-improving measures
3. Characteristics of the sanitary condition of the child population over different periods of time
4. Assessment of health status in different years
40. Physical development of children and adolescents is determined by the following indicators:
1. Anthropometric
2. Sexual development
3. Somatometric
4. Physiometric
41. A comprehensive assessment of the physical development of children takes into account:
1. Morbidity in children and adolescents
2. Morphofunctional state
3. Body weight
4. Chest circumference
42. Methods of individual assessment of children's physical development:
1. According to standard tables
2. Calculating development criteria
3. Sigma deviations
4. Assessment tables
43. Acceleration is:
1. Accelerated physical development of children
2. Onset of puberty at an earlier age
3. Change in the rate of age-related development
4. Acceleration of the growth and development process at an earlier age
44. Name the exogenous causes (theories) of acceleration:
1. Alimentary
2. Change in cosmic radiation background

3. Heterozygous
4. Genetic
5. Neurogenic
45. Name the endogenous causes (theories) of acceleration:
1. Alimentary
2. Neurogenic
3. Heterozygous
4. Genetic
46. "School maturity" - These are:
1. Functional maturity of the body's main physiological systems by the time the child enters school, ensuring learning without harm to health.
2. Physical readiness of the body for systematic schooling.
3. Functional readiness of the body for schooling.
4. Level of neuropsychic development appropriate to the child's age.
48. Percentage of greenery on hospital grounds (%):
1. Not less than 60
2. Not more than 15
3. 10-154.
4. 30-40
49. It is advisable to locate the following hospitals on the outskirts of a populated area:
1. Tuberculosis and psychiatric hospitals
2. Multidisciplinary hospitals
3. General hospitals
4. Specialized hospitals
50. Distance of medical buildings from the site boundary:
1. No less than 15 m from the red line
2. Along the red construction line
3. No less than 30 m from the red line
4. 5 m
51. Hospitals are classified according to their profile:
1. Centralized, pavilion
2. Multidisciplinary, specialized
3. Block
4. Regional, city

52. Required area of the hospital garden per bed (sq. m)
1. 25
2. 10
3. 35
4 5
53. The location of the central kitchen unit meets hygienic requirements:
1. In a separate building
2. In the semi-basement of one of the treatment rooms
3. On the top floor of the main building
4. In an extension to the utility building
54. Composition of the ward section:
1. Wards, treatment and auxiliary rooms
2. Utility rooms
3. Bathroom, doctors' offices
4. Solarium, laboratories
55. Rooms of the ward section that must have natural light:
1. Wards
2. Corridor
3. Patient toilet
4. Enema room

56. Composition of the ward section:
5. Wards, medical and auxiliary rooms
6. Utility rooms
7. Bathroom, doctors' offices
8. Solarium, laboratories
57. Rooms of the ward section that must have natural light:
5. Wards
6. Corridor
7. Patient toilet
8. Enema room

58. Health-improving measures at industrial enterprises:
1. Medical and preventive
2. Sanitary and technical
3. Organizational and technical
4. Sanitary and educational
59. Sanitary and technical measures taken to improve working conditions at industrial enterprises include:
1. Personal protective equipment
2. Study of workers' morbidity
3. Periodic medical examinations
4. Aeration
60. Hygienic assessment of working conditions at industrial enterprises consists of:
1. Compilation sanitary characteristics of the worker's detailed profession
2. Conducting timekeeping of the work performed
3. Assessment of working conditions
4. Clinical observation
61. The main causes of occupational injuries are the following factors:
1. Sanitary and hygienic requirements
Organizational and technical
2. Chemical production
3. Biological production
4. Physical production

Semester 5

Control exam questions

1. What types of radiation are included in solar radiation?
2. How to determine the intensity of solar radiation and what is the wavelength range of radiation?
3. The biological effects of solar radiation on living organisms.
4. How to calculate the solar radiation intensity and determine the specific energy consumption (SEC)
5. What are the permissible SEC and SEC standards for residential, public, and hospital spaces?
6. What are the sources and types of artificial lighting lamps and fixtures? 2. How to calculate the specific power of general artificial lighting (W/m2)
7. How to assess the level and quality of artificial lighting in residential and hospital spaces in accordance with existing standards.
8. What regulatory documents assess the levels and quality of artificial lighting, and what measures should be taken to improve illumination?
9. What is the intensity of solar radiation that determines air temperature?
10. Indoor temperature conditions and their impact on the human body.
11. What instruments are used to measure air temperature, and how?
12. How to determine air humidity and assess its impact on the human body.
13. What instruments, how, and in what units is relative humidity measured?
14. What are the optimal temperature and humidity conditions in residential and hospital premises?
15. How to determine and draw a wind rose on a diagram.
16. What determines atmospheric pressure at different altitudes above sea level?
17. Explain the operating principle of anemometers.
18. What determines the speed of air masses at different altitudes and latitudes?
19. The role and impact of sudden changes in atmospheric pressure on the human body.
20. How to determine atmospheric pressure levels using barometers and a barograph, and in what units.
21. What opportunistic and pathogenic microorganisms can be found in indoor air?
22. How can the composition of microflora in indoor air be determined?
23. How can the microbial contamination and gas pollution of indoor air be assessed? How is atmospheric air protected from pollution?
24. What methods are there for assessing the quality of drinking water, including physical, chemical, and special methods?

25. What are mechanical and chemical methods of water purification? 26. 3. What special methods exist for improving the quality of drinking water?
26. . How are water decontamination, degassing, deodorization, and softening performed?
27. What physical methods are used to disinfect drinking water?
28. What is soil (define it), how is soil classified by structure and composition, degree of contamination, and what are the main components of soil?
29. What are the types of sanitary cleaning of populated areas, and its stages?
30. What are the methods for recycling and rendering harmless solid household and industrial waste?
31. What is local and general sewerage (irrigation fields, plowing fields)?
32. The concept of rational, balanced, adequate, and safe nutrition.
33. The physiological significance of nutrition and its main functions. 35. Daily energy expenditure by component elements, methods for determining daily caloric intake
34. Recommended physiological norms for protein, fat, carbohydrate, and mineral intake, and their significance
35. Basic principles and methods for compiling a menu layout
36. Calculating the energy value of a diet and the amount of nutrients according to a menu layout, assessing a diet
37. Nutritional status of various population groups, its types, and significance.
38. Define a rational, adequate, balanced, safe, and complete diet.
39. Diet, proper distribution of food throughout the day.
40. What is a rational diet for children, adolescents, and adults?
41. Daily energy expenditure by professional groups.
42. Types of nutritional status.
43. Concepts of food poisoning and their modern classification.
44. What regulations and instructions determine the procedure for investigating, recording, and conducting laboratory tests for food poisoning. 47. The main types of pathogens causing food poisoning and the foods that cause them. Prevention.
45. Botulism and its prevention.
46. The main causes of microbial food poisoning and their prevention.
47. Staphylococcal intoxication and its prevention.
48. Mycotoxicoses and their prevention.
49. Non-microbial food poisoning and its prevention.
50. What are the key indicators for assessing individual physical development?
51. What are physical development standards, how are they developed, on what basis, and for which groups?
52. What units define the degree of deviation from normal indicators of a child's physical development?
53. How can deviations from the norm in physical development be graphically depicted?
54. How can a comprehensive assessment of physical development be conducted, including determinations (biological age and regression scales)?
55. What level of physical development should be considered harmonious?
56. What level of physical development should be considered disharmonious?
57. How can physical development levels in preschool and school-age children be assessed using physical development standards?
58. General principles underlying the design and operation of preschool institutions.
59. Key operational aspects of preschool institutions.
60. Hygienic requirements for the improvement and sanitary maintenance of preschool institutions. 12. Room composition and basic planning principles
61. What are the methods of room aeration and their hygienic standards?
62. Classes and their types, physiological and hygienic significance in the development of a child's health.
63. Daily routine – definition, significance in the development and development of a child’s health.
64. What is an air-thermal regimen and what hygienic standards exist?

65. What is an air-thermal regimen and what hygienic standards exist?
66. What are the methods of room aeration and their hygienic standards?
67. What criteria are used to assign students to desks, tables, and other furniture?
68. What is the maximum permissible weekly workload for elementary school students?
69. After which lesson is a significant decrease in performance observed in younger and older schoolchildren?
70. What is the preferred distribution of the academic workload for younger and older schoolchildren?
71. How is a child's readiness for school determined?
72. What methods are used to identify psychophysiological signs of readiness for school?
73. The concept of balanced nutrition. Principles of balanced nutrition for children and adolescents?
74. The importance of proteins, fats, carbohydrates, vitamins, and minerals in shaping children's health?
75. Hygienic principles for standardizing and organizing nutrition for children and adolescents?
76. Methods for assessing the actual nutritional status of children in organized groups?
77. Monitoring the organization of nutrition in institutions for children and adolescents?
78. Hygienic principles for organizing physical education for children and adolescents, the main objectives of physical education?
79. Health deviations associated with a lack of movement or excessive physical activity?
80. Organization of classes and requirements for structuring a physical education lesson?
81. What is the air-thermal regime and what hygiene standards exist?
82. What are the methods of aeration in a room and their hygiene standards?
83. What criteria are used to assign students to desks, tables, and other furniture?
84. What is the maximum weekly workload for elementary school students?
85. What is the definition of "professional suitability"?
86. What are the principles of career counseling and how is professional suitability determined?
87. What are the medical aspects of career choice and individual medical professional counseling?
88. What is the procedure for completing medical documentation during medical and professional counseling for adolescents?
89. What are the hygienic requirements for a hospital site, its general development plan, and landscaping?
90. What are the hygienic requirements for the placement and layout, orientation, decoration, and equipment of premises in medical and preventive institutions?
91. Hygienic requirements for the layout, equipment, and fitting out of a hospital admissions department and ward section.
92. Types of hospital wards. Standards for area and cubic capacity. Requirements for the layout, development, and equipment of sections and corridors.
93. Hygienic requirements for the layout and equipment of the surgical department and operating complex (block).
94. Hygienic requirements for the layout and equipment of the infectious diseases department.
95. Prevention of nosocomial infections.
96. Requirements for personal hygiene rules for patients, medical personnel, and support staff of a healthcare facility.
97. Hygienic requirements for the hospital grounds and the general site development plan.
98. Hygienic requirements for the placement, layout, sanitary equipment, and sanitary conditions of reception and discharge areas, departments, and ward sections.
99. Hygienic requirements for the orientation, layout, equipment, and sanitary equipment of wards.
100. Hygienic requirements for the microclimate, heating, ventilation, and lighting of wards and other hospital premises.
101. The importance of maintaining a hospital

ANNEX №5

THE LIST OF SITUATIONAL TASKS

Situational task № 1

In order to objectively monitor the sanitary condition of the therapeutic department, studies were conducted that showed the following results:

- the air temperature in the corridors was 16-18 degrees, and in the chambers 22-23 degrees, humidity 50-60%, the speed of air 0.1 m / sec;
- the content of carbon dioxide was 1.0%;
- illumination by incandescent lamps at night in the majority of wards- 30 kl, in two wards - 100 kl, in the corridor - 20 lx

Give a hygienic assessment and recommendations on the results of research

Situational task №2

The ward section of the therapeutic building, which has the "P" -shaped configuration, consists of 10 wards with a south-eastern orientation, 2 - the north-western, 3 - the north-eastern and 3 - the south-western.

- Choose a rational variant of the orientation of the wards for the insolation regime in the summer season for seriously ill patients with hypertensive crisis and myocardial infarction, for patients with hypotension, gastric ulcer, cholecystitis and convalescent patients?
-

Situational task №3

In the operating unit of the surgical department for 30 patients, after 4 operations the air temperature was - 26 degrees, relative humidity 75%, carbon dioxide content 0.5%. The analysis of bacterial contamination of air, revealed single staphylococci were found.

Draw up a plan of measures to improve the air regime of the operating unit.

Situational task №4

In the working village, where there was a chemical plant, the population was provided with drinking water from an open reservoir in a centralized way. At the local water station, the water was purified by sedimentation, 70% of it was coagulated, and water was also filtered. Recently, residents began to note the deterioration of the organoleptic properties of water and the appearance of an extraneous smell in it, the microbial number is 200, the residual chlorine is not higher than 0.1 mg / l.

- What is the possible reason for the appearance of an odor in the water?
- What measures do you recommend to improve the quality and safety of drinking water?
-

Situational task №5

An analysis of the results of health and physical development survey of a 7 years old schoolchild . He showed that the deviation along the length of the body is - 2σ, by the mass + 1,8 σ and the circumference of the chest + 1,5 σ, multiple tooth caries, mild degree of myopia, sleep disturbance, expressed and prolonged sleep period, hypertrophied tonsils.

- Assess the level of physical development and health of the child.
- Draw up a conclusion with justification for recommendations for improving the health of this schoolchild?

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Situational task №6

During one day 47 people with the same complaints were addressed to the clinic: nausea, vomiting, abdominal pain, some of the patients had have multiple loose stools. All of them were pale, cyanosis, tachycardia noted and in one patient - icteric sclera. The dinner consisted of mutton stew, tea and cake, bought at a nearby store. It turned out that the batch of cakes was sold only 18-36 hours after production. The incubation period lasted 2-4 hours. All patients recovered after 3-5 days. When examining the pastry chef, who participated in making a batch of cakes, a festering wound from a cut on his finger was found

- What could be the cause of de health terioration?
- Set the diagnosis of this disease?
- Your recommendations for determining the causes of mass diseases and their examination?
•

Situational task №7

Assess the nutritional and biological value of the therapist's breakfast:

The energy value of breakfast is 555 kcal, its qualitative composition: proteins - 22 g, fats - 28 grams, carbohydrates - 72 g, the content of calcium - 292 mg, phosphorus - 409 mg. Breakfast provides the body with iron, satisfies 1/10 of the need for vitamin A covers, 1/6 of the need for vitamin B and 1/4 for vitamin PP. C. How many grams of protein, fat and carbohydrates is missing in the daily diet of a doctor with an energy requirement of 3000 kcal.

- What percentage of daily energy expenditure is the breakfast energy value
- Your recommendations for balancing the daily diet of the doctor

Situational task №8

On September 16 at 6 pm milk in tinned jars was delivered to the village hospital . Milk of evening milking was delivered to the hospital on the waybills. The milk is white with a slightly yellowish tinge. Taste and smell is typical for milk. The presence of foreign impurities was not detected. Specific of milk - 1.030; acidity - 28 ° according to Turner; the content of solids is density 13.5%; the fat content is 2.5%.

- Give an opinion on the possibility of using the received batch of milk in the patient's diet?

Situational task №9

Extract from the individual card. Vorobyov N.S., 39 years, 19 years of working at the enterprise in the position of a locksmith-adjuster of precision instruments. He turned to the doctor of the enterprise with complaints of general weakness, fatigue, lethargy, headache, metallic taste in the mouth, drooling, bleeding gums. The worker was directed to a consultation in the clinic of occupational diseases, and then hospitalized. The state of admission: pulse - 80 beats / min, AD - 160/100, constant low back pain, gingivitis. In urine, 0.06 mg / l mercury is detected. Characteristics of working conditions. Performance of duties of the worker is related to soldering and adjustment of thermometers, mercury tonometers. There is no special room for the work. Work is carried out on a regular table without exhaust ventilation. During the hiring and during work, a medical examination took place. These complaints appeared 9 months ago.

- What is the main occupational hazard in the workplace of a locksmith and the possible causes of deterioration in health?
- What sanitary and hygienic measures should be taken to improve working conditions
- What specialists must participate in periodic medical examinations, and what kind of research should be done for this category of workers?

Situational task №10

Baked bread is brought to the student's canteen . At external examination it is established: the form is round, the surface is smooth, without cracks and foreign inclusions. The crumb from the upper crust lags behind, there are areas of impurity and hardening, uniformly porous, with crushing pressure it crumples, no extraneous inclusions; Color, taste, smell characteristic of this type of bread. Moisture 47%, acidity 9 °, porosity 55%.

- Assess the quality of bread
- Decide on the possibility of its use in nutrition and make recommendations for improving the quality of bread

Situational task №11

In the buffet of the student hostel, whole milk is delivered in packages: a homogeneous liquid of white color with a yellowish tinge. The taste and smell is normal. The aftertaste is uncertain. Density - 1,030; fat content - 3.2%, dry residue - 12.5%, acidity 28 ° according to Turner, Evaluate the quality of milk.

- Decide on the possibility of using it in students nutrition

Situational task №12

a) Determine the age of the boy with a date of birth on March 12, 1995., the date of his survey - February 16, 1999, and what age group does he belong to

b) Determine the age of the girl with the date of birth on August 20, 1990., the date of the survey is March 25, 1999, and what age group does she belong to

Situational task №13

The study of the indicators of natural illumination in the class showed that the light factor is 1: 4, the natural illumination coefficient on the desk at the inner wall is 1.5%, the actual illumination in this class is 200 lux.

- Assess the level of natural illumination in the classroom
- If necessary, make recommendations for improving illumination in the classroom
-

Situational task №14

A sick patient entered the clinic for occupational diseases, he was 31 years old, worked as a loader for 10 years, and in recent years electric welder, complained of: fatigue, memory loss, gait and speech disturbance.

Objectively: the patient has weakened muscle tone, reduced mental activity, not sharply expressed masklike face. Changes in the lungs and heart were not observed. The liver is enlarged by 1.5 cm, an anatomic gastritis.

- Define the alleged occupational hazard and pathology.
- Your recommendations for clinical examination and health improvement of the worker.

Situational task №15

Estimate the level of physical development of a girl of 9 years by the method of sigma deviations with the subsequent graphic depiction of the profile of physical development according to the data given in the table.

Table of calculating sigma deviations

Symptom	Indicators of the subject	M	σ	The difference between M and indicators of	Sigma deviation
Height, cm	131,0	132,9	6,12	+ 1,9	-0,3
Weight, kg	25,2	29,7	4,1	+ 1,2	-0,2
Breast circumference, cm	65,5	63,3	5,02	+2,2	+0,44

Profile of physical development

	-3σ	- 2 σ	-1σ	M	+1σ	+2σ	+3σ
Height, cm							
Weight, kg							
Breast circumference, cm							

Situational task №16

- Assess the physical development of a 10-year-old boy using the method of sigma deviations, followed by a graphic depiction of the physical development profile, as shown in the table.

Table of calculating sigma deviations

Symptom	Indicators of the subject	M	σ	The difference between M and indicators of	Sigma deviation
Height, cm	137,4	131,8	6,1	+ 4,1	+2
Weight, kg	33,4	28,7	2,4	+ 5,3	+2,9
Breast circumference, cm	65,8	63,7	3,1	+16	+1

Profile of physical development

	- 2 σ	-1σ	M	+1σ	+2σ
Height, cm					
Weight, kg					
Breast circumference, cm					

Situational task №17

In the clinic of occupational diseases, a 32-year-old patient I-ev, working at the carpool No. 2, a mechanic, was brought with complaints about: headaches , insomnia, general weakness, nausea, vomiting, metallic taste in the mouth, abdominal pains, salivation.

Objectively: the patient has a reduced diet, the skin and mucous membranes are pale. Vesicular breathing in the lungs, the border of the heart is within the norm, at the top - systolic noise, bradycardia (pulse - 36 beats per minute), hypotension (100/45 mm Hg), hypothermia - 35.4 ° C. In the blood there is leukopenia.

January 23, he was engaged in disassembly, repair and adjustment of the engine checking it in the box of the machine. After 2 days from the beginning of the repair, he felt ill and was taken by ambulance to the hospital.

Identify the alleged occupational hazard and establish a diagnosis.

Situational task №18

The analysis of the air of a clean surgical department showed that the content of CO2 in the surgeon's workplace was found to be 1.7%; dust - 0,2mg / m3, ethyl alcohol vapor - 1305 mg / m3 (MPC - 1000 mg / m3), the content of pathogenic staphylococcus - 6 colonies in 250 liters of air.

- Give a hygienic assessment and recommendations for optimizing the operating environment.

Situational task №19

On the following indicators, draw rose of the winds:

Rumba	N.	N.E.	E.	S.E.	S.	W.	N.W	Calm
Repeatability (absolute number)	22	20	7	8	10	7	5	5

Situational task №20

The surface of the ventilation whole of the production room is 1 m / sq. M. The speed of air movement is 0.1 m / s, the cubic capacity of the room is 360 m3.

- Determine the frequency of air exchange.
- Give a hygienic assessment of the natural ventilation of the room.
-

Situational task №21

With the southern orientation of the chambers, the insolation time is 3 hours, the insolation area is 50%, the amount of heat due to solar radiation is 50 kcal / h.

- Define the type of insolation mode.
- What factors influence the intensity of room insolation?
- Radiation intensity when is the highest?
-

Situational task №22

Classroom area of 60 m / sq. is illuminated by 6 lamps of 100 watts each, the voltage in the grid is 220 V. The coefficient ξ is 2.5.

- Determine the average specific power of artificial lighting.
- Determine the level of artificial illumination in Lux.

Situational task №23

Assess the quality and safety of drinking water in accordance with the following parameters: water is clear, with bitter taste, odorless, sulfate and phosphate content of 1000 mg / l, microbial number is 150, oxidation 7.0.

- Give a hygienic assessment of the quality and causes of changes in the organoleptic characteristics of drinking water.
- Your recommendations on the use of water for drinking purposes.

Situational task №24

Workers of the weaving department experienced a decrease in working capacity, memory, increased heart rate, signs of fatigue. In this regard, noise measurements were made at two points at a distance of 1/3 along the longitudinal axis from the walls of the room. The noise level in the weaving workshop is 100 dB, the noise is intermittent.

- What device measures the noise level?
- Are the measuring points selected correctly?
- Provide a hygienic assessment of the noise level and causes of deviations in the health status of workers

Situational task №25

The air was sampled in the production room by an aspirational method using a universal aspirator, the filter was weighed before work. Its weight before measurements was 0.0120 mg, after aspiration it was 0.520 mg. The volume of pumped air is 500 liters.

- Determine the dust content in 1 cubic meter of air.
- Give a hygienic assessment of the dust content of the air.

Situational task №26

For chemical and bacteriological analysis, water from the well was taken by pot in a quantity of 1.0 liter, into chemically clean glassware. The water analysis was carried out 4 hours after sampling. In water, sulfates were detected in watered - 300 mg / l, chlorides 570 mg / l, fluorine 0.8 mg / l, the microbial number corresponded to 150 m / t. The water had a salty flavor, colorless, without foreign smell.

1. Was the water sample for the analysis correct?

- Give a hygienic assessment of the chemical and bacteriological composition of the water.

Situational task №27

There are three people in the chamber with the volume of 60 m / cub. Airing is carried out through the window, which is open for ten minutes every hour. The speed of air movement is 1 m/s. The surface of the window is 0.15 m / sq.

- Determine the frequency of air exchange.
- Assess the effectiveness of natural ventilation in the ward.

Situational task №28

For the general sanitary evaluation of the open water body, water was taken along the upper and lower boundaries of the water intake by a bathometer at a distance of 10 m from the shore, at a depth of 30 cm. The chemical composition of the water corresponded to: ammonia nitrogen 0.3 m / l, nitrogen nitrites 0.8 mg / l, hardness total - 8 mg / eq., sulfate 800 mg / l., Chloride 500 mg / l.

- Assess the chemical composition of the water.
- Was the water sample taken correctly?
- Is it possible to use water for drinking purposes?

Situational task №29

In the area the river is the source of water supply. Water is coagulated, settled, filtered, chlorinated, undergoes fluorination. The results of the water sample analysis were as follows: total hardness 7.0 M.Geq, dry residue 395.0 mg / l, sulphates 180 mg / l, chlorides 143.4 mg / l, fluorine 0.9 mg / l, the microbial number is 60, the odor is 1 point, the transparency is more than 30 cm, the residual chlorine is 0.3.

- Assess the water quality.
- Determine whether it is suitable for drinking.

Situational task №30

The laboratory delivered samples of soil from the land plot for the development of health facilities. The results of the soil analysis show that the enterococcus index is 7, the pathogenic Salmonella is 0, the larvae is 5, the pupae are 10. The organic compounds do not exceed the background, the presence is within 0.01 mg / kg.

- Give a conclusion on the composition of the soil?
- What is the category of pollution?
- Is it possible to allow construction, if not, why?

Situational task №31

For the temporary water supply of the military unit without preliminary reconnaissance, the water supply point is deployed. Water is stored in barrels, chlorination of the water is carried out by clarified solution of bleach at a rate of 20 mg / 1lt, the duration of chlorination is 30 minutes, after which there was a faint smell of chlorine.

- Is it possible to use it for drinking water supply of the military unit?
- Was the chlorination of the water carried out correctly?

Situational task №32

The company barracks were built at the rate of 3 m/sq. per 1 service man, the air volume - 7 m/kub per 1 service man. The beds are set in 2 tiers at a distance of 0.5 m from the windows and outside walls. Temperature + 18 ° C, humidity - 70%, airing for 5 minutes every 2 hours.

- Give a hygienic assessment of the internal placement of servicemen in the barracks?
- Assess the airspace status?
- Is the ventilation mode correct?

Situational task №33

Citizen E., bought boiled fish for dinner at the market, after its consumption, three of five family members had symptoms of food poisoning. Symptoms: dizziness, abdominal pain, nausea, vomiting, uneven dilatation of the pupils, swelling of the eyelids, nasal speech, temperature + 35 ° C, frequent pulse.

- Determine the cause of the resulting health disorder in family members.
- What activities need to be carried out in this case.

Situational task №34

A health camp was deployed for 320 children during the summer holidays. The source of water supply is an artesian well, with a depth of 40 m (a rate of 250 m3 / day), and for swimming there was a lake located in the forest, at a distance of 1 km from the camp. The approximate rate of water consumption is 100 l / day.

The results of the analysis of artesian water correspond to the norms for organoleptic indicators, nitrates in the amount of 120 mg / l, nitrites 10 mg / l, sulfates - 1000 mg / l were determined by chemical parameters.

- Give a hygienic assessment of the water by chemical parameters.

Situational task №35

Chlororganic pesticides were brought for the processing of a personal land plot in the autumn period. They were stored in barrels in the street, under the open sky.

- Assess the storage conditions of pesticides?
- Give correct advice on the rational storage of pesticides.

Situational task №36

In the farm, seeds were etched with granozan in the open air, the seeds were etched manually in barrels, by mixing. The etching station was 250 m away from the residential area. The seed treatment site had a slope for drainage of rain water, covered with asphalt, without a canopy. Individual and collective protective equipment was not used. The site did not have fencing and ventilation equipment.

- Give a hygienic assessment of working conditions?
- Assess seed dressing conditions.

Situational task №37

In the ward of the therapeutic department, febrile patients are located. The air temperature is 18 ° C, the relative humidity is 78%, the air speed is 0.1 m / s.

- Give a hygienic assessment of the climate in the ward?

Situational task №38

The ward for therapeutic patients has an air temperature of +28 ° C, a relative air humidity of 90%, a radiation temperature of +35 ° C, and an air speed is 0.1 m / s.

- Give a hygienic assessment of the climate in the ward?
- Your recommendations for optimizing the air environment of the room.

Situational task №39

Premises for temporary deployment of servicemen in the late autumn period in the field were organized using tent property, on a site with a small shrub, taking into account the wind rose.

The tents are disguised, ditches are dug. In the first lane there are units. Headquarters, medical center, kitchen, service buildings inside the camp in the second strip are located

- Is it correct, how the camp is located, what facilities are lacking.

Situational task №40

Servicemen during the planned exercises were given dry rations for cooking in the field. In addition, they were provided with means for disinfecting water.

- What kind of food is a dry ration?
- What means are used to disinfect individual water supplies inA the field?

Bloc C

ANNEX № 6

INSTRUCTION for the individual students' work on the topic:

INSTRUCTION for the independent work of students on the topic:

"Consideration of the project of health facilities"

Familiarization with the explanatory note and passport data of the projected hospital: composition of the hospital complex; general data on water supply, sewerage, ventilation, heat supply of buildings;

1. Familiarization with the situational plan, an estimation of correctness of a choice of the ground area. When solving the situation problem, answer the following questions:

- Is the hospital conveniently located for the served population (remoteness from residential quarters, availability of access roads)?
- Is the hospital section isolated from industrial and other "harmful" facilities?
- Whether sanitary protection zones are observed between the hospital and enterprises?
- Whether concentrations of substances in the air exceed “Maximum Permissible Concentration” taking in to account "Rose of the winds"?
- What is the terrain, the height of standing groundwater, the purity of the soil?
- Are there any green arrays nearby?

2. Consider the general plan of the site and evaluate its positive and negative aspects: the configuration and size of the plot, the total area, the hospital building system, functional areas, percentage of construction and gardening, the availability of a hospital garden and its area per bunk, the gaps between buildings and the site boundary, the number of entrances and exits.

3. Outline the found shortcomings, give recommendations for their elimination.

COMPOSITION OF THE PROJECT under the project is understood a set of documents, according to which new construction or reconstruction of the object should be carried out. The project consists of text and graphic parts.

TEXT PART - a set of explanatory notes, various references, official documents and other textual materials. In addition to the general explanatory note there may be explanatory notes for certain sections of the project (general part, architectural and construction, technological, water supply and sewerage, heating and ventilation, etc.). The explanatory note outlines the main technical, economic and construction indicators. The study of the explanatory note should precede the study of the drawings and greatly facilitate this work.

GRAPHICS PART - set of different drawings. Graphic representations of medical and prophylactic, residential buildings and other objects are called architectural and construction drawings.

SITUATIONAL PLAN - plan of the terrain on which the land plot is located, intended for the construction of the projected facility and its immediate surroundings. The situational plan characterizes the location of the facility in relation to the surrounding buildings, breaks from nearby residential buildings, industrial enterprises, etc. Rose of the winds also applied to the situational plan, with the help of which one can judge the frequency of wind direction and the spread of atmospheric pollution.

GENERAL PLAN - refers to the plan of the land plot of the projected facility, which depicts the boundaries of the site, existing or projected buildings and other structures, green spaces, roads. In the place next to the drawings, an explication (explanation, designation) is given, in which all the buildings and structures depicted on the master plan are listed with the symbols (numbers, letters) allowing them to be found on the drawing. Beginning to read the drawing, first of all, read the inscriptions that indicate the name of the drawn object or its conditional cipher, project organization, etc.

The project also includes graphic images of the contours of buildings and premises, the placement of furniture, technological equipment, heating, ventilation, water supply, sewerage and others. Drawings are considered for the purpose of checking compliance with hygienic norms and rules when designing an object.

Among the project drawings, priority should be given to situational and general plans, facade drawings, horizontal and vertical sections of buildings, and then technological drawings, drawings of heating, ventilation, water supply, sewerage, etc.

In this case, it is necessary:

- to recognize those or other conditionally depicted objects;
- determine their shape, size and materials from which they will be made;
- perform various calculations, for example, calculate the distance, area and cubic capacity of the premises, the percentage of the slope of the terrain.

For the sake of clarity and unification of images in drawing up drawings use conventional graphic images. Depending on the content, the drawings have the corresponding markings, carried out in large letters at the bottom of the drawing sheet on the right:

AC-K - architectural and construction and structural,
VC - water supply and sewerage,
OV - heating and ventilation,
EO - electric lighting,
HS - gas supply,
ST - low-current devices (telephone, radio, etc.).

SANITARY AND TECHNICAL EQUIPMENT OF THE HOSPITAL

Using the explanatory note the student answers the following questions in writing:

- How to organize the food and water supply of the hospital;
- Ventilation, heating and hospital lighting system. Is emergency lighting available to continue emergency work (in the operating room, birth control room, etc.) when the electricity is cut off in the common network;
- presence of telephone communication, signaling, radio-communication;
- Sewage system of the hospital: is it envisaged that the wastewater of the infectious body is disinfected.

Answering the questions, the student gives a general conclusion on the whole project, including data on the general and situational plans. It is necessary to state the conclusions and recommendations for the elimination of the noted shortcomings, which are discussed by the whole group with the participation of the teacher.

I

Instruction for students' the individual work on the topic:

"Sanitary and hygienic requirements for health facilities"

Consider and study the placement of medical buildings, their floor plans.

List the departments located in the main building, characterize their relative position, the path of the patients.

Consider the admission department (for adults and children). Determine the list and size of rooms, the principle of the flow of income and discharge of patients.

The location of the department (floor, wing, etc.), determine the number of rooms in the ward, the number of beds in the treatment and diagnostic rooms or the laboratory, the presence of a refreshment room, day

rooms for patients, linen, toilet, etc. The presence of a corridor (width, length, features of location - central, lateral); orientation of the wards around the world. All the data of the first 4 items are explained verbally, only the shortcomings explained to the instructor are fixed. After that each student makes a detailed description and datas of sanitary and hygienic assessment of any one of the departments of the hospital or polyclinic (as instructed by the teacher). In the description of the clinic, it is necessary to note the presence of a separate entrance from the street, the presence of the lobby, wardrobes and registries, the entrance for staff and administration rooms, for adults and entrances through filters or viewing boxes for children and taking tests, the presence is expected for FTO and X-ray departments, gynecological, skin and venereal surgeries, etc. To note the expediency of their location, determine the orientation and area of the doctors' offices. Describe the corridor, its dimensions.

Conclusions and recommendations for the elimination of the identified shortcomings, comparison them with the data of San PiN. When describing the therapy department or another department, initially give a hygienic assessment of the ward section, answering the following questions:

the number of sections in the department;

a set of premises for each ward section;

common premises for the whole department;

number of chambers and number of beds;

area per bed, orientation and SC;

the number of chambers with orientation to the north and north-west;

location of the nurse on duty and distance from the ward of the seriously ill;

procedural, its location, distance to the nurse's post, area, orientation;

day room for patients, its location, area;

Pantry, orientation;

dining room, its orientation, area and number of seats;

a sanitary unit for patients; set of rooms, availability of natural lighting;

ward corridor, its width, the presence of a light break and windows at its ends with 2-sided building;

height of premises, air cube in wards.

When hygienic evaluation of the layout of the therapy department, is donebe guided by the hygienic requirements for the internal planning of the ward section. Give conclusions and recommendations for the elimination of shortcomings. Hygienic evaluation of the planning of the surgical department (operating unit) consists of hygienic requirements for the layout of the ward section and the specifics of the unit (unit).

location of the operating unit in the hospital building;

availability of convenient and short ways of ligation with surgical departments, receiving rest, X-ray room;

set of premises of the operating unit;

Is the number of operating rooms sufficient?

the possibility of separating the septic ("purulent") operating room;

operating room, its area, state of natural light, orientation;

preoperative, its relationship with the operating room;

Anesthesia, its relationship with the operating room;

sterilization, its location;

postoperative wards, their location in relation to the operating unit, the number of beds in them, the area per 1 bed;

other premises of the operating unit gypsum, the office of the head, room of the surgeon, instrumental and material).

availability of freight elevator between floors.

Give a hygienic assessment of the internal planning of the obstetric ward, answering the questions:

isolation of obstetric ward from gynecological;

the presence of a generic and postnatal physiological and observational obstetric departments, the composition and area of the premises;

prenatal chambers, number of beds in them, area per 1 bed, orientation;

birth chambers, number of beds in them, area per 1 bed, orientation;

presence of the intensive care unit, its area;

operational, its area, orientation, support facilities;

the composition of the rooms of the postpartum physiological department;

postpartum chambers for puerperas, the number of beds in them, the area per 1 bed, SK, orientation;

wards for newborns, the number of beds in them, the area per bed, orientation;

the device of locks in front of wards for newborns;

availability of a day room and a dining room in the physiological department;

isolation of the observational obstetrics ward (section, subsection) from the physiological, the presence of a gateway between them;

presence in the observatory department of the birth, operative, postpartum chambers;

the presence of a generic box for the isolation of parturient women and puerperas with newborns, for the gynecological department;

Be guided by the hygienic requirements for the internal planning of the ward section and the specifics of the planning for the department on the following list of issues;

presence of a small operating room with a preoperative, their area, orientation;

procedural, its area, orientation;

availability of a convenient connection with the physiotherapy department.

When describing the infectious disease department, note the number of infections treated, how the isolation of patients with various infections is carried out; Identify the features of the device chambers, the presence of boxed chambers (which are boxes), full boxes and half-boxes; note the presence of locks for personnel and tambours for patients coming from the street into a full box.

Is there a separate entrance, a sanitary checkpoint (or showers) in the nursing facility. How is the discharge of infectious patient done, where their clothes are disinfected and stored, is there a room for washing and disinfecting dishes, toys, household items, etc.? How is wastewater disinfected, is there any exhaust ventilation in the rooms? Are the areas of the main premises, their orientation in accordance with sanitary norms and rules. Give conclusions and recommendations for the elimination of identified shortcomings.

Recommendations for students individual work on assessing the adequacy of student nutrition

The organization of a rational food forstudents

Studying young people should be considered as a professional-production group of the population of a certain age category, united by specific features of work and living conditions. When organizing the

rational nutrition of students, a correspondence is needed between the energy value and the qualitative composition of the daily diet. The required average daily food intake is shown in Table 1

Average daily set of food for students

Products		Quantity, gr	Products	Quantity, г
Bread, rye wheat,		250	Fats	35
Crackers		5	Vegetable oil	22
Whet flour		20	Meat	240
Pasta		15	Fish	64
Cereals, legumes		60	Egg	36
Sugar Confectionary		95	Milk and acid milk	400
Potatoes		320	Cottage cheese	24
Vegetables		340	Sour cream	20
Fruits, juices		50	Cheese	15
Dried fruits		16	Tea	2

The energy needs of male students are 2,585 kcal (10.8 MJ), female students 2,434.5 kcal (10.2 MJ). Proteins should be 12% of the daily energy value of rations, and the proportion of proteins of animal origin is at least 60% of their total number. Fats account for 30% of the total energy values of the diet, and carbohydrates accounted for (58%). Daily need of calcium -800 mg, phosphorus 1600 mg, magnesium 500 mg, potassium 2500-5000 mg, iron 10 mg. The content of vitamins in a daily diet should correspond to the need for vitamins to match the values for an adult.

Calculation of daily energy consumption

The hygienic assessment of the daily diet starts with the determination of daily energy consumption. Energy consumption can also be determined indirectly (respiratory energy metering, alimentary and calculated tabular-timing method). The method of alimentary energy metering is based on accurate consideration of the energy requirement for food and control over the body weight in dynamics of 7-14 days. Timing - tabular method allows approximately to calculate the daily energy consumption of a person with or without the main exchange. In this case, we will use the table-time method.

Task 1. It is necessary to calculate the amount of individual energy consumption per day, using the data in Table 2.

It is necessary to conduct a personal timekeeping by a student of the time per day spent for each type of activity. The data is entered in the column "Duration", thus, the amount of time expended should be taken into account, should be 1440 min (24 hours). Then each activity is multiplied by the elapsed time, and the received data are entered in the last column "Energy consumption ...". The obtained data are summed and multiplied by the body weight. By calculating the proportion you determine 10-15% (unaccounted for energy), the data obtained are added to the total amount of energy consumption. Thus, you will get a daily power consumption.

Task 2. Determination of energy value and content of basic nutrients (proteins, fats, carbohydrates, vitamins and mineral elements) in the daily diet.

To complete this task, make a menu-layout (list of foods, expressed in weight categories - grams). Fill in the table 3.

In the first column you write down the menu layout, in the second column the total amount of food eaten, the subsequent columns are filled with data on the chemical composition of the diet. To do this, use the table 4. (Chemical composition of food). The amount of the total amount of food eaten is multiplied by the energy value of this product, indicated in Table 3. For example, all of the eaten 300 grams is multiplied by the data of Table 2.3. (on calories, proteins, fats, carbohydrates) and divide by 100 (a proportion is made up). Thus, the table 3 is filled.

Task 3. Comparison of the received data with physiological norms a food for students.

The indicators obtained from actual nutrition are compared with the physiological norms of nutrition for students, given in Table 5.

Task 4. The power mode is evaluated. The distribution of food for breakfast, lunch, dinner on energy value (kcal) is taken into account in percentage. Let's say breakfast is 20% of the total caloric content, lunch is 40%, etc. These data are compared with the requirements of rational nutrition.

Task 5. Micro symptoms of malnutrition are defined. Data are presented in Table 6.

Task 6. Write a conclusion, give recommendations for correcting the individual nutrition of the student.
Table 1

Daily timekeeping and calculation of energy costs (including basic exchange) for various activities (indicative)

№	Types of activities	Duration in min	Energy consumption kcal	Energy consumption
1	sleep	480	0,0155	0,0155x 480
2.	Morning training		00648	
3.	Cleaning of the bed		00329	
4	Washing		00504	
5	Shower		00570	
6	Putting on and undressing shoes and clothes		00264	
7	WC		00281	
8	feeding		00236	
9	walking		00625	
10	Transport ride		00267	
11	Practical classes: Sitting, Standing		00250, 00360	
12	Listening to lectures		00243	
13	Food intake		00236	
14	Washing dishes		00313	
15	Rest standing		00264	
16	Rest sitting		00229	
17	Rest without sleep		00183	
18	Cleaning of the room		00402	
19	Care for children		00360	
20	Laundry		00511	
21	Dancing		00596	
22	Singing		00290	
23	Swimming		11190	
24	Floor exercise		00845	
25	Different chores		00573	
26	Self preparing		00250	
27	Personal hygiene		00329	

Table 3

Product	Proteins, g	Fats, g	Carbohydrates, g	Energy value, cal
Millet	11,2	3,9	56,6	311
Buckwheat	10,8	3,2	54,4	295
Rice	7,5	3,2	56,1	283
Peas	20,5	2,0	48,6	298
Beans	21,0	2,0	15,6	292
Wheat flour extra class	10,3	1,1	68,9	334
Wheat flourt of the ferst grade	10,6	1,3	67,6	331
Wheat flour of the second grade	11,7	1,8	63,7	324
Semolina	10,3	1,0	67,7	328
Wheat millet	11,5	3,3	62,1	330
Pearl barley	9,3	1,1	66,5	320
High grade pasta	10,4	1,1	69,7	337
Pasta of the first grade	10,7	1,3	68,4	335
1-st grade wheat bread	7,9	1,0	48,1	239
2-nd grade wheat bread	8,6	1,3	45,3	233
Bread wheaten molded 2 grades	8,1	1,3	42,8	221
Granulated sugar	0	0	99,8	379
Honey				
Caramel with fruit and berry	0	0,1	95,7	370
Chocolates with chocolate-	4,0	39,5	51,3	569
Biscuit cake, interlaced with	4,7	20,0	49,2	391
Milk, pasteurized with 3.5%	2,79	3,5	4,69	61
Sour cream 25% fat content	2,6	25,0	72,7	248
Curd fatty	14,0	18,0	2,8	238
Fat kefir	2,8	3,2	4,1	56
Butter, unsalted	0,5	82,5	0,8	748
Cheese, Dutch, round	23,7	30,5	-	258
Cheese Russian	23,0	29,0	-	360
Ice Cream	3,3	3,5	21,3	179
Ice cream - Plombir	3,2	3,5	21,3	179
Sunflower refined sunflower	0	99,9	0	899
Cottonseed oil	0	99,9	0	899
Eggplant	1,2	0,1	5,1	24
White cabbage	1,8	0,1	5,1	24
Potatoes	2,0	0,4	16,3	80
Bulb onions	1,4	-	9,1	41
Pepper red, sweet	1,3	-	5,3	27
Watermelon	0,7	0	8,8	
Apricots	0,9	0,1	9,0	41
Bananas	1,5	0,1	19,0	89
Apples	0,4	0,4	9,8	45
Lamb 1 category	15,6	16,3	0	209
Beef 1 category	18,6	16,0	0	218
Horse meat 1 category	19,5	9,9	0	167
Pork meat	14,3	33,3	0	357
Chicken meat	18,2	18,4	0	241
Fats	0	99,7	0	897
Sausage Moscow	11,1	21,8	0	350
Doctor's sausage	12,8	22,2	0	257
Sausage Ukrainian	16,5	34,4	0	376
Eggs with chicken	12,7	11,5	0	157
Fresh / salted fish				

Bream	17,1	4,1	-	105
Sudak and other species	18,4	1,1	-	84

Sample menu layout and chemical composition of the daily diet

The name of dishes (menu-layout)	The amount of food eaten in	Proteins, g		Fats, g		Carbohydrates		Energy value,cal, g
Breakfast Rice of rice of milk sugar 2. Tea without sugar 3. Bread		gr	k/k	gr	k/k	gr	k\k	
	50	3.75	15	1.6.6				
	200							
	15							
total								

Similarly, the chemical composition of lunch and dinner is calculated. Calculate vitamins and mineral elements, using the data of Table 4.

Table 4

Chemical composition of food products

Products	A	Д	E	C	B1	B2	B6	B12	PP	Folacin
Rye bread	0	0	2,20	0	0,18	0,08	0,17	0	0,67	30,0
Bread, wheat	0	0	3,30	0	0,23	0,08	0,29	0	3,10	29,0
Buckwheat	0	0	6,65	0	0,43	0,20	0,40	0	4,19	32,0
Groats of oatmeal	0	0	3,40	0	0,49	0,11	0,27	0	1,10	29,0
Rice	0	0	0,45	0	0,08	0,04	0,36	0	1,60	19,0
Millet	0	0	2,60	0	0,42	0,04	0,52	0	1,55	40,0
Milk	0,02	…	…	0,6	0,02	0,13	…	0	0,10	4,5
Cream 20%	0,15	0,12	0,52	0,3	0,03	0,11	0,06	0,5	0,10	7,8
Sour cream 30%	0,23	0,15	0,55	0,8	0,02	0,10	0,07	0,36	0,07	8,5
Curd fatty	0,10	…	0,38	0,5	0,05	0,30	0,11	1,0	0,30	35,0
Kefir fatty	0,02	…	0,07	0,7	0,03	0,17	0,06	0,4	0,14	7,8
Cheese Dutch	0,21	…	0,31	2,8	0,03	0,38	0,11	1,1	0,20	11,0
Cream cheese	0,15	…	0,35	1,2	0,02	0,39	0,10	0,3	0,15	14,0
Vegetable oil	…	42,0	…	…	…	…	…	…	…	…
Margarine creamy	0,02	20,0	trace	…	trace	trace	0,03	…	0,02	…
Cabbage	0	trace	0,06	45,0	0,03	0,04	0,14	…	0,74	10,0
Potatoes	0	…	0,10	20,0	0,12	0,07	0,30	…	1,30	8,0
Bulb onions	0	…	0,20	10,0	0,03	0,03	0,11	…	0,60	14,0
Pepper	0	…	0,67	15,0	0,03	0,04	0,04	…	0,20	4,0
Cucumbers	0	…	0,10	10,0	0,06	0,07	0,13	…	10,0	9,0
Tomatoes	0	…	0,39	25,0	0,02	0,04	0,07	…	0,20	13,0
Apricot	0	…	0,95	10,0	0,04	0,04	0,13	…	0,50	14,0
Cherry	0	…	0,32	15,0	0,05	0,06	0,05	…	0,70	3,0
Apples	0	…	0,63	16,0	0,03	0,02	0,06	0	0,30	2,0
Orange	0	…	0,22	60,0	0,04	0,03	0,04	0	0,20	5,0
Lemon	0	…	…	40,0	0,05	0,02	0,09	0	0,30	4,0

Mandarin	0	…	0,20	38,0	0,03	0,05	0,06	0	0,30	10,0
Black currant	0	…	0,72	200,0	0,05	0,33	…	0	0,60	…
Grapes	0	…	…	6,0	0,03	0,05	0,06	0	0,30	10,0
Strawberry	0	…	0,54	60,0	0,02	0,02	0,08	0	0,15	1,0
Raspberries	0	…	0,58	25,0	0,03	0,05	0,11	0	0,36	9,0
Sea buckthorn	0	…	10,3	200,0	0,03	0,04	0,13	0	0,30	5,0
Rosehip	0	…	1,71	650,0	0,24	2,45	0,41	0	0,40	140,0
Beef 1category	trace	…	057	trace	0,52	0,14	0,33	…	2,60	4,10
Beef liver	8,2	…	1,38	39,0	0,36	0,75	0,30	10,0	5,0	2,50
Pork meat	trace	….	0,57	trace	0,52	0,14	0,33	…	2,60	4,10
Category 1 chicken	0,07	…	0,20	1,80	0,12	0,17	0,23	…	5,8	3,50
Sausage amateur	…	…	…	….	0,18	0,15	0,13	…	2,30	3,90
Chicken egg	0,25	2,20	2,00	…	0,07	0,44	0,14	0,52	0,19	7,00

Mineral elements content of food

Products |	Sodium	Potassiu	Calcium	Magnesiu	Phosphor	Iron
Bread, wheat	495	180	33	54	130	2,4
Rye bread	610	245	35	47	158	3,9
Buckwheat	-	167	70	98	298	80
Rice	26	54	24	27	97	18
Millet	39	201	27	101	233	70
Beans	40	1100	150	103	541	12,4
Peas	69	873	115	107	329	9,4
Milk	50	146	120	14	90	0,06
Cream 20%	35	109	86	8	60	0,2
Sour cream 30%	32	95	85	7	59	0.3
Curd fatty	41	112	150	23	216	0.5
Fat kefir	50	146	120	14	95	0,1
Dutch cheese	1100	100	1040	50	540	1,2
Russian Cheese	880	200	760	40	600	0,8
Watermelon	16	64	14	224	7	1,0
Melons	32	118	16	13	12	1,0
Cabbage	13	185	48	15	31	1,0
Potatoes	28	568	10	23	58	0,9
Bulb onions	50	225	87	10	58	1,0
Pepper	19	163	8	11	16	-
Cucumbers	8	141	23	14	42	1,4
Tomatoes	40	290	41	20	26	1,4
Apricot	30	305	28	19	26	2,1
Cherry	20	256	37	26	30	1,4
Apples	26	248	16	9	11	2,2
Orange	13	197	34	13	23	0,3
Lemon	11	163	40	12	22	0,6
Sorrel	15	500	47	85	90	2,0
Black currant	32	372	36	35	33	0,9
Grapes	26	255	45	17	22	0,6
Pears	14	155	19	12	16	2,3
Raspberries	19	224	40	22	37	1,6
Plum	18	214	28	17	27	2,1
Garlic	120	260	90	30	140	1,5
Beef 1category	65	325	9	22	188	2,7
Lamb 1 category	80	270	9	20	168	2,0
Pork meat	58	285	7	24	164	1,7
Horse meat 1 category	73	355	10	25	200	2,9
Beef liver	104	277	9	18	314	6,9
Category 1 chicken	79	240	18	21	190	1,6
Carp	55	265	35	25	210	0,80
Bream	100	335	30	35	220	0,63

Sausage amateur	900	211	19	17	146	1,7
Chicken egg	134	140	55	12	192	2,5

Clinical symptoms of vitamin deficiency

Organs and tissues	Symptoms
Eyes	1. With vitamin A deficiency, conjunctivitis occurs (dryness, thickening, pigmentation of the conjunctiva, open part of the eyeball and loss of shine and transparency, which can be easily determined by drawing eyelids.) Plaques of Iskerski (Bito stains) are the remains of cornified epithelial cells. 2. Vitamin A, B, deficiency causes a disturbance of dark adaptation.
Lips	1. With insufficiency of vitamins B2 and B6, angular stomatitis is observed (erosion and cracks in the corners of the lips, with hypovitaminosis both corners of the mouth are affected. 2. Signs of deficiency of B2, B6, PP is cheilosis (vertical lip cracks with edema and hyperemia, more often in its central part). Sometimes such by weather conditions changes are caused.
Tongue	1. A sign of vitamines B2, B6, PP is insufficiency the edema of the tongue (dental impressions along the edge of the tongue), atrophy of the papillae (the filiform papillae, the polished tongue disappear). 2. If vitamins B2 and PP are deficient, hyperemia and hypertrophy of the papillae (papillae hypertrophied, red or hypertrophic, the surface appears grainy (strawberry-red) is observd 3. Signs of vitamin PP deficiency can be a bright red tongue, teeth prints and a burning sensation of the tongue. 4. With hypovitaminosis B6, glossitis occurs (sometimes it can be a consequence of trauma under the influence of solid food or dentures)
Gums	1. With a deficiency of vitamin C, loose and bleeding gums, swollen interdental papillae and gum margins are noted. This symptom is absent in young children, even in severe cases of hypovitaminosis (child scurvy)
Teeth	The frequency of tooth decay is significantly related to the nature of the food, the lack of fluoride and especially the sugar content, refied carbohydrates.
Skin	1. When vitamin A deficiency occurs, xerosis (total dryness of the skin with peeling, but it is necessary to keep in mind the weather conditions like mud, dry, hot and windy climate). 2. Insufficiency of vitamins A and C. causes the development of follicular follicle hyperkeratosis (a spiny-shaped plaque around the neck of the hair , it is easy to examine when it holding a hand over the affected area, the skin is as it were). Localization - in the buttocks, hips, elbows. 3. With deficiency of vitamins P and C, petechiae are observed (small hemorrhages on the skin and mucous membranes, additional hemorrhages appear when applying the tourniquet)

Nails	Symptom of iron deficiency is coilochia (bilateral spoon-like deformation of nails in children of older age groups).
Organs of digestion	With dyspeptic syndrome (smell from the mouth, unpleasant taste in the mouth, belching, heartburn, nausea, vomiting, flatulence) it is necessary to examine the stomach, duadenum, the intestine, determining the boundaries of the liver, as there may be various diseases of the digestive tract.
Nervous system	1. The lack of vitamins B1, B6, PP and C promotes the development of psychomotor changes (apathy is often determined in the elderly, but more often as a sign of protein-energy malnutrition observed in young children in the development kwashiorkor ‘ это название заболевания)- . Children can not be measured accurately and approximately can be determined by the child's reaction to bright objects and color. Increased fatigue, decreased performance, irritability, general weakness. 2. If vitamin B1 is deficient, insomnia and muscle pain are observed. To confirm the connection of pathological processes with the state of nutrition, special attention is given to diseases in which the essential role is played by eating disorders like alimentary dystrophy, diseases of the digestive organs, liver, metabolism (obesity, diseases of the cardiovascular system).

Semester 5

Control exam questions

1. What types of radiation are included in solar radiation?
2. How to determine the intensity of solar radiation and what is the wavelength range of radiation?
3. The biological effects of solar radiation on living organisms.
4. How to calculate the solar radiation intensity and determine the specific energy consumption (SEC)
5. What are the permissible SEC and SEC standards for residential, public, and hospital spaces?
6. What are the sources and types of artificial lighting lamps and fixtures? 2. How to calculate the specific power of general artificial lighting (W/m2)
7. How to assess the level and quality of artificial lighting in residential and hospital spaces in accordance with existing standards.
8. What regulatory documents assess the levels and quality of artificial lighting, and what measures should be taken to improve illumination?
9. What is the intensity of solar radiation that determines air temperature?
10. Indoor temperature conditions and their impact on the human body.
11. What instruments are used to measure air temperature, and how?
12. How to determine air humidity and assess its impact on the human body.
13. What instruments, how, and in what units is relative humidity measured?
14. What are the optimal temperature and humidity conditions in residential and hospital premises?
15. How to determine and draw a wind rose on a diagram.
16. What determines atmospheric pressure at different altitudes above sea level?
17. Explain the operating principle of anemometers.
18. What determines the speed of air masses at different altitudes and latitudes?
19. The role and impact of sudden changes in atmospheric pressure on the human body.
20. How to determine atmospheric pressure levels using barometers and a barograph, and in what units.
21. What opportunistic and pathogenic microorganisms can be found in indoor air?
22. How can the composition of microflora in indoor air be determined?
23. How can the microbial contamination and gas pollution of indoor air be assessed? How is atmospheric air protected from pollution?
24. What methods are there for assessing the quality of drinking water, including physical, chemical, and special methods?
25. What are mechanical and chemical methods of water purification? 26. 3. What special methods exist for improving the quality of drinking water?
26. . How are water decontamination, degassing, deodorization, and softening performed?
27. What physical methods are used to disinfect drinking water?
28. What is soil (define it), how is soil classified by structure and composition, degree of contamination, and what are the main components of soil?
29. What are the types of sanitary cleaning of populated areas, and its stages?
30. What are the methods for recycling and rendering harmless solid household and industrial waste?
31. What is local and general sewerage (irrigation fields, plowing fields)?
32. The concept of rational, balanced, adequate, and safe nutrition.
33. The physiological significance of nutrition and its main functions. 35. Daily energy expenditure by component elements, methods for determining daily caloric intake
34. Recommended physiological norms for protein, fat, carbohydrate, and mineral intake, and their significance
35. Basic principles and methods for compiling a menu layout
36. Calculating the energy value of a diet and the amount of nutrients according to a menu layout, assessing a diet
37. Nutritional status of various population groups, its types, and significance.

38. Define a rational, adequate, balanced, safe, and complete diet.
39. Diet, proper distribution of food throughout the day.
40. What is a rational diet for children, adolescents, and adults?
41. Daily energy expenditure by professional groups.
42. Types of nutritional status.
43. Concepts of food poisoning and their modern classification.
44. What regulations and instructions determine the procedure for investigating, recording, and conducting laboratory tests for food poisoning. 47. The main types of pathogens causing food poisoning and the foods that cause them. Prevention.
45. Botulism and its prevention.
46. The main causes of microbial food poisoning and their prevention.
47. Staphylococcal intoxication and its prevention.
48. Mycotoxicoses and their prevention.
49. Non-microbial food poisoning and its prevention.
50. What are the key indicators for assessing individual physical development?
51. What are physical development standards, how are they developed, on what basis, and for which groups?
52. What units define the degree of deviation from normal indicators of a child's physical development?
53. How can deviations from the norm in physical development be graphically depicted?
54. How can a comprehensive assessment of physical development be conducted, including determinations (biological age and regression scales)?
55. What level of physical development should be considered harmonious?
56. What level of physical development should be considered disharmonious?
57. How can physical development levels in preschool and school-age children be assessed using physical development standards?
58. General principles underlying the design and operation of preschool institutions.
59. Key operational aspects of preschool institutions.
60. Hygienic requirements for the improvement and sanitary maintenance of preschool institutions. 12. Room composition and basic planning principles
61. What are the methods of room aeration and their hygienic standards?
62. Classes and their types, physiological and hygienic significance in the development of a child's health.
63. Daily routine – definition, significance in the development and development of a child’s health.
64. What is an air-thermal regimen and what hygienic standards exist?

65. What is an air-thermal regimen and what hygienic standards exist?
66. What are the methods of room aeration and their hygienic standards?
67. What criteria are used to assign students to desks, tables, and other furniture?
68. What is the maximum permissible weekly workload for elementary school students?
69. After which lesson is a significant decrease in performance observed in younger and older schoolchildren?
70. What is the preferred distribution of the academic workload for younger and older schoolchildren?
71. How is a child's readiness for school determined?
72. What methods are used to identify psychophysiological signs of readiness for school?
73. The concept of balanced nutrition. Principles of balanced nutrition for children and adolescents?
74. The importance of proteins, fats, carbohydrates, vitamins, and minerals in shaping children's health?
75. Hygienic principles for standardizing and organizing nutrition for children and adolescents?
76. Methods for assessing the actual nutritional status of children in organized groups?
77. Monitoring the organization of nutrition in institutions for children and adolescents?
78. Hygienic principles for organizing physical education for children and adolescents, the main objectives of physical education?

79. Health deviations associated with a lack of movement or excessive physical activity?
80. Organization of classes and requirements for structuring a physical education lesson?

81. What is the air-thermal regime and what hygiene standards exist?
82. What are the methods of aeration in a room and their hygiene standards?
83. What criteria are used to assign students to desks, tables, and other furniture?
84. What is the maximum weekly workload for elementary school students?
85. What is the definition of "professional suitability"?
86. What are the principles of career counseling and how is professional suitability determined?
87. What are the medical aspects of career choice and individual medical professional counseling?
88. What is the procedure for completing medical documentation during medical and professional counseling for adolescents?
89. What are the hygienic requirements for a hospital site, its general development plan, and landscaping?
90. What are the hygienic requirements for the placement and layout, orientation, decoration, and equipment of premises in medical and preventive institutions?
91. Hygienic requirements for the layout, equipment, and fitting out of a hospital admissions department and ward section.
92. Types of hospital wards. Standards for area and cubic capacity. Requirements for the layout, development, and equipment of sections and corridors.
93. Hygienic requirements for the layout and equipment of the surgical department and operating complex (block).
94. Hygienic requirements for the layout and equipment of the infectious diseases department.
95. Prevention of nosocomial infections.
96. Requirements for personal hygiene rules for patients, medical personnel, and support staff of a healthcare facility.
97. Hygienic requirements for the hospital grounds and the general site development plan.
98. Hygienic requirements for the placement, layout, sanitary equipment, and sanitary conditions of reception and discharge areas, departments, and ward sections.
99. Hygienic requirements for the orientation, layout, equipment, and sanitary equipment of wards.
100. Hygienic requirements for the microclimate, heating, ventilation, and lighting of wards and other hospital premises.
101. The importance of maintaining a hospital

Раздел 4

METHODOLOGICAL MATERIALS DEFINING THE PROCEDURES FOR ASSESSING KNOWLEDGE, ABILITIES, SKILLS, AND/OR EXPERIENCE CHARACTERIZING THE STAGES OF COMPETENCY DEVELOPMENT. DESCRIPTION OF INDICATORS AND CRITERIA FOR ASSESSING COMPETENCIES, DESCRIPTION OF THE ASSESSMENT SCALE.

This section provides a methodological description of the procedure for assessing acquired competencies (parts of competencies). All types of assessment tools listed in the summary table for a discipline (module) should, as a rule, be accompanied by a methodological description of their implementation procedure. The purpose of this description is to ensure that students, upon reviewing the teaching materials, fully understand how assessment will proceed (taking a test, writing a quiz, solving problems, defending an essay, coursework, or project, etc.). The exam ticket includes two theoretical questions and a practical assignment, corresponding to the competencies being developed. The exam is conducted orally. Students have 30 minutes to answer and solve the problem. A maximum of 20 points can be awarded for answering the theoretical questions and 10 points for solving the problem. The points are converted into a grade: 30 points - 5; 25 points - 4; 20 points - 3.

SCALE OF ESTIMATION

ASSESSMENT SCALE OF THE REPORT WITH PRESENTATION (formative assessment)

	Indicator name	**mark (in %)**
THE FORM		10
1	Plan of the report (introduction, main body, conclusions,	0-5
2	A logical and understandable transition from one part to another, the validity of the conclusions.	0-5
CONTENT		50
1	Matching the topic	0-15
2	Presence of the main topic	0-10
3	Disclosure of the main problem on the topic, the situation in KR or in RF	0-25
4	Presence of conclusions corresponding to the topic and content of the main	0-15
PRESENTATION		25
1	Title page with title	0-2
2	Design slides and (slide change, sound, graphics, tables)	0-5
3	Brief and clear presentation of the text	0-10
4	Logical sequence of slides	0-5
5	Presence of printout of slides	0-3
REPORT		15
1	Correctness and accuracy of speech during protection	0-5
2	Answers to questions)	0-5
3	Compliance with regulations	0-5
Total points		**100**

ESTIMATION SCALE OF THE ESSAY (Formative assessment)

№	**Indicator name**	**mark (in %)**
OUALITY OF WRITING THE ESSAY		
1	Introduction	0 -10
2	Chapter 1 (statistical drawings, diagrams, photographs, tables)	0 - 25
3	Chapter 2 (statistics)	0 -25
4	Conclusion	0 -20
5	References, normative and technical documents	0 -05
6	Quality and presentation design, volume, Literacy	0 -10
7	Answers on questions	0 -05
Totall assessment for formative monitoring		**100**

ESTIMATION SCALE OF SANITARY SURVEY CARD ASSIGNMENT (formative assessment)

№	**Indicator name**	**mark (in %)**
THE FORM		
1	Introduction. Planning	0-10
2	Map of the situational plan. Photo of the hospital (front and side facade).	0-15
3	Description and preparation of the general plan	0-15
4	Description and planning of the internal layout of the office	0-15
5	Assessment of the sanitary and hygiene of a department and ward	0-20
6	Work place hygiene and personal hygiene of medical workers	0-15
7	Conclusion and recommendations	0-10

Total points	100

SCALE OF ESTIMATION OF TEST TASKS (midterm assessment)

1. There are 25 closed questions in one test task.
2. The tasks provide ready answers to the choice, one correct and oll the other wrong.
3. The student must remember: in each assignment with the choice of one correct answer, the correct answer is there.
4. For each correct answer - 4 points
5. The overall score is defined as the sum of the points scored.
6. The mark (in%).

SCALE OF ESTIMATION KNOWELEDGE OF THE ORAL SURVEY (midterm assessment)

When assessing verbal responses to the KNOW level check, the following criteria are taken into account.

1. Knowledge of goals, objectives and methods of researching discipline.
2. Completeness of the answer.
3. Knowledge of terminology and its use in answering.
4. The ability to explain the causal relationship between the studied factor and the health of the population, form conclusions, give reasoned answers.
5. Logical and consistent answer, correct answers to additional questions.

The mark of 16-20 points - the answer is logically correct, the student uses the discipline terminology used in the discipline, as well as medical terminology in general; demonstrates excellent knowledge in the field of hygiene; knows the research methods used in hygiene; activities aimed at strengthening the health of the population, formation of a healthy lifestyle and the prevention of dental diseases; Deeply understands the statistical indicators characterizing the health of the population;

A mark of 10-15 points - the answer demonstrates basic knowledge in the field of hygiene, the student knows the peculiarities of the influence of environmental factors on human health; demonstrates insufficient knowledge in the field of preventive measures aimed at strengthening the health of the population, formation of a healthy lifestyle and the prevention of dental diseases; average understanding of statistical indicators characterizing the health of the population; partly knows the methods of research used in hygiene.

A mark of 5-10 points - the answer demonstrates the average knowledge in the field of hygiene, the student knows 1-2 methods of research used in hygiene, does not deeply understand the preventive measures aimed at strengthening the health of the population, formation of a healthy lifestyle and prevention of dental diseases; does not know the statistical indicators characterizing the health of the population.

A mark 1-4 points - the answer demonstrates very weak knowledge in the field of hygiene; does not know the methods of research used in hygiene, is poorly versed in preventive measures aimed at strengthening the health of the population and the formation of a healthy lifestyle and the prevention of dental diseases; does not know the statistical indicators characterizing the health of the population.

SCALE OF ESTIMATION OF ANALYTICAL AND PRACTICAL TASKS midpoint assessment -

To check students' competencies skills and expertise

When assessing the answers for skills and expertise level, the following criteria are taken into account.

A mark of 8-10 points - the student understands and analyzes environmental factors, uses terminology; adopts alternative preventive solutions, knows hygienic methods of research; Deeply reveals the effect of the environmental factors on human health; perfectly identifies cause-effect relationships, can analyze and interpret information; caries out measures for the prevention of diseases of the oral cavity and IOMP.

A mark 4-7 points - the student understands and skills analyzes expertise environmental factors, uses terminology; but does not take alternative preventive solutions, does not have sufficient knowledge of hygienic methods of research; not sufficiently reveals the effect of the factor on human health; poorly

reveals cause-effect relationships, poorly knows how to analyze and interpret information; superficially knows methods of organizing activities for the prevention of oral diseases and IOMP.

A mark of 1-3 points - the student partially understands and analyzes environmental factors, partially uses terminology; does not accept alternative preventive solutions, does not possess hygienic methods of research; weakly reveals the degree of the effect of the factor on human health; poorly knows cause-effect relationships, does not know how to analyze and interpret information; poorly knows methods of organizing activities for the prevention of diseases of theoral cavity and IOMP.

A mark of 0 points - the student does not understand the problem or does not give intelligible answers, does not try to solve the task.