



Факултет по обществено здраве

Катедра „ХИГИЕНА“

4002 Пловдив, бул. В. Априлов № 15 А
тел.: 032 200 656; 032 200 655
email: hygiene@fph.mu-plovdiv.bg



Faculty of Public Health

Department of HYGIENE

15A, Vasil Aprilov Blvd, 4002 Plovdiv
phone: 00359 32 200 656
email: hygiene@fph.mu-plovdiv.bg

EXAM SYLLABUS IN HYGIENE FOR STATE EXAMINATION

*as a part of the state exam of Hygiene, Epidemiology, Infectious diseases and Social medicine
academic 2024/2025 year*

1. Hygiene as a main prophylactic medical science – subject, aim, tasks, branches, methods. Current hygiene environmental issues.
2. Atmosphere – importance and structure. Air composition.
3. Physical factors of the atmosphere.
4. Climate and weather. Diseases dependent on meteorological factors. Acclimatization.
5. Air pollutants (classification, sources) and their health effects. Winter and summer smog – characteristic and health importance. Prevention of air pollution.
6. Importance of water as a major element of the biosphere. Waterborne diseases. Hygiene requirements for drinking water quality.
7. Hygiene requirements for water distribution – water supply sources and systems of water distribution. Water purification and disinfection. Drinking water safeguard zones.
8. Hygiene of soil. Soil structure, physical characteristic, and chemical content. Microorganisms and protozoa in the soil. Biogeochemical diseases. Soil pollution and health impacts. Waste management.
9. Hygiene characteristics of living conditions in the areas. Hygiene requirements for the planning and building in the areas. Urban greening and public health. Noise in urban areas – definition, sources, health effects, prevention, and control. Urbanization.
10. Hygiene characteristics of the housing conditions. Health effects related to hygiene conditions of the houses.
11. Hospital hygiene. General hygiene requirements for hospitals. Medical wastes management.
12. Hygiene requirements to hospitals (clinics) with high epidemiological risk – infectious diseases hospitals (clinics) and those for treatment of tuberculosis, children’s hospitals (clinics), psychiatric hospitals.
13. Hygiene requirements to hospitals (clinics) with high epidemiological risk – operating theatre (room), hospitals (clinics) for delivery and gynaecological diseases.
14. Healthy lifestyle. Conditioning and physical activity as the elements of the healthy lifestyle.
15. Personal hygiene. Hygiene characteristics of washing means. Hygiene characteristics of dress materials and shoes.
16. Ionizing radiation – basic terminology, dose unites. Sources of ionizing radiation. Occupational and medical exposure.
17. Biological effects of ionizing radiation.
18. Risk and control of ionizing radiation (ionizing radiation monitoring). Main principles of protection.

19. Hygiene of nutrition. Proteins, fats, and carbohydrates – physiological importance, sources, and needs. Dietary fibre.
20. Vitamins – physiological importance, sources, and needs.
21. Minerals – physiological importance, sources, and needs.
22. Hygiene importance of milk and dairy products, eggs.
23. Hygiene importance of meat, fish and their products.
24. Hygiene importance of cereals, wheat, vegetables and fruit, pulses (legumes) and nuts.
25. Hygiene importance of sugar, sugar products and honey. Fats and oils. Alcohol. Beverages.
26. Genetically modified foods.
27. Food processing and preservation.
28. Healthy nutrition. Enteral and parenteral nutrition.
29. Principles of diet therapy.
30. Alternative nutrition.
31. Nutrition of pregnant and lactating women.
32. Nutrition of children.
33. Nutrition of schoolchildren.
34. Nutrition of people engaged in mental work.
35. Nutrition in sportsmen.
36. Nutrition in case of occupational hazards. Nutrition in case of stress.
37. Nutrition in elderly.
38. Foodborne diseases resulting from biological food contamination. Prevention.
39. Foodborne diseases resulting from chemical food contamination. Prevention.
40. Non-microbial food poisoning. Prevention.
41. Diseases resulting from food hypersensitivity (“food allergy”). Drug-nutrient interactions.
42. Diseases resulting from irregular nutrition.
43. Dietary prevention of obesity.
44. Dietary prevention of cardiovascular diseases.
45. Dietary prevention of cancer.
46. Dietary prevention of diabetes.
47. Dietary prevention of gout.
48. Dietary prevention of osteoporosis.
49. Occupational hygiene (medicine) – subject, aim, tasks. Work activity forms. Occupational hazards.
50. Physiology of work. Changes in the body during work. Work capacity, fatigue, and exhaustion.
51. Ergonomics – basic principles. Ergonomics in the use of video display.
52. Physical hazards in the workplace – industrial microclimate and atmospheric pressure.
53. Physical hazards in the workplace – noise.
54. Physical hazards in the workplace – occupational vibrations.
55. Physical hazards in the workplace – ultrasound and infrasound, ultraviolet radiation and infrared radiation.
56. Non-ionizing radiation in the workplace – radiofrequency radiation.
57. Non-ionizing radiation in the workplace – extremely low frequency radiation and static fields.
58. Non-ionizing radiation in the workplace – lasers.
59. Dust and particulate – classification, composition, health effects and risk. Occupational prevention.
60. Chemical hazards in the workplace – classification, toxic effects of hazardous substances. Toxicology – toxicokinetic and toxicodynamic. Hazards, risks, and risk assessment. Prevention of occupational diseases and poisoning.
61. Chemical hazards in the workplace – heavy metals. Occupational health risk. Prevention.

62. Chemical hazards in the workplace – toxic gases. Occupational health risk. Prevention.
63. Chemical hazards in the workplace – organic solvents. Occupational health risk. Prevention.
64. Chemical hazards in the workplace – pesticides. Occupational health risk. Prevention.
65. Occupational medicine issues in Healthcare.
66. Occupational medicine issues in Chemical industry.
67. Occupational medicine issues in Textile industry.
68. Occupational medicine issues in Mechanical engineering.
69. Occupational medicine issues in Metallurgy.
70. Occupational medicine issues in Agriculture.
71. Childhood and adolescent hygiene. Growth and developmental age periods.
72. Age, morphological and physiological peculiarities among children and adolescents.
73. Calendar (chronological) age. Biological age. Acceleration. Characteristics of morbidity among children and adolescents.
74. Physiological bases of school education. Prevention of school fatigue and exhaustion.
75. Hygiene requirements to daily regimen of children and adolescents.
76. Physiological bases of physical education. Medical control on physical education.
77. Hygiene requirements to Crèches and Kindergartens.
78. Hygiene requirements to Schools.

BIBLIOGRAPHY

1. Hygiene and Medical Ecology (Textbook for medical and dental students) edited by Prof. P. Gatseva, Lax Book Plovdiv, 2016. ISBN: 978-619-189-042-2
2. Hygiene and Ecology (Handbook for practical exercises for medical students) edited by Assoc. Prof. P. Gatseva, Medical Publ. House VAP Plovdiv, 2011. ISBN: 978-954-8326-47-6
3. Environmental Health – Hygiene. Edited by L. Ševčíková. Comenius University in Bratislava, Slovakia, 2015. ISBN 978-80-223-3930-8
4. Environmental and Occupational Medicine: Textbook for RSU foreign students. Edited by J. Dundurs. Rīga: Rīga Stradiņš University, 2014. ISBN 978-9984-793-62-7

Assoc. Prof. S. Harizanova MD, PhD

Head of the Department of Hygiene

The Conspectus is approved by the Departmental Council on 13/09/2024 Protocol № 09.