# GM28 Hygiene. Educational program

### **Department of hygiene**

## 2nd year students (4-th semester)

#### Lectures

- 1. The role of sanitary and environmental Sciences in providing preventive health challenges. Factors influencing the health of the population.
- 2. Atmospheric air as the external environment. Influence of meteorological factors on the human organism. Air pollution as a major hygienic and ecological challenge.
- 3. Water as a factor of the biosphere and the necessary condition for the existence of life on earth. Hygienic requirements for water quality of water sources.
- 4/Environmental and hygienic problems of the hydrosphere, caused by anthropogenous pollution of surface and groundwater. Methods of improving the quality of water.
- 5. Solar radiation and its role in ensuring of life on earth. The influence of separate components of solar radiation on the livelihoods and health of the person.
- 6. Soil as a factor in the external environment. Role of soil in the transmission of endemic, infectious and parasitic diseases. Pollution and self-purification of soil.
- 7. Nutrition as a factor of preservation and strengthening of health. The value of the individual components of the food in the human diet.
- 8. Ecological problems of human nutrition. The concept of «alien substances», «food chain» and biologically active substances.
- 9. Hygienic and ecological problems in developing countries

## **Practical classes (lessons)**

- 1. The occupation to test control of knowledge, abilities and possessions, obtained by students in previous departments.
- 2. Methods of study of microclimate indoors and its evaluation, Impact on health.
- 3. Solar radiation ,hygienic assessment. Natural and artificial lighting. The methods of evaluation.

- 4. The use of artificial ultraviolet radiation in the preventive purposes.
- 5. Hydrosphere of the planet. Assessment of drinking water quality.
- 6. Methods of improving the quality of drinking water.
- 7. Risk factors. Methods of risk assessment of the effects of air pollution on human health.
- 8. The final test on section.
- 9. Nutrition and its role in ensuring health and optimal duration of life of the population. Evaluation of the usefulness and adequacy of foods.
- 10. Methods of assessing the quality of food and there falsification.

The possible impact of falsificated food on human health. (2 lessons)

- 11. Diseases caused by intake of unsafe food. Microbial and non microbial food poisoning.
- 12. The nutrition of organized groups. Requirements for the planning, equipping and operation of food premises (the kitchen).
- 13. Lesson interactive analysis prepared from the lessons (role playing game)
- 14. The final test on section of nutrition.
- 15. Seminar lesson.
- 16. Final Test session on the results of the 1 st semester.( Zagot )

## 3rd year students (5th semester)

### Lectures

- 1. Hygiene mental and physical labor. Production hazards and occupational diseases. The concept of severity and intensity of labour. Guidelines for prevention of occupational diseases.
- 2. Developing countries: Ecological and hygienic Problems.
- 3. The main problems of occupational health at the work with radioactive substances and sources of ionizing radiation.

- 4. Factors influencing the health of children. Hygienic bases of the normal growth and development of the child. Physical development, indicators, evaluation methods.
- 5. Hospitals planning system. Nosocomial infections, Protective regime in medical institutions.

#### Practical classes

- 1. Industrial noise and vibration. Hygienic value, impact on the body. Methods of measurement and evaluation. Guidelines for prevention.
- 2. Hygienic evaluation of industrial dust and its sources in production. Classification of occupational dust diseases. Methods of identification and assessment. Guidelines for prevention.
- 3. Radiation control on objects of application of ionizing radiation sources. The main preventive measures aimed at preventing harmful effects.
- 4. Radiation safety at work with radioactive substances and ionizing radiation sources in the open and closed types. Directions of prophylaxis.
- 5. Industrial poisons in factories. Indicators of toxicity and their definition. Guidelines for prevention of occupational poisoning.
- 6. Seminar lesson on occupational medicine collated abstract messages on a particular topic.
- 7. The final test session on occupational medicine.
- 8. Health and physical development of the child and adolescent population. Methods of examination and evaluation.
- 9. Hygiene of training in school. Requirements to the regime of the day and school schedule. The role of physical education in ensuring the formation of a normal development of the younger generation.
- 10. Hygienic requirements to the technical means of teaching, and visual teaching AIDS. Requirements to computer classes.
- 11. The final test session on section hygiene of children and adolescents.
- 12. Hospitals. Hygienic requirements to placement and planning system.
- 13. Infectious diseases wards and hospitals. Requirements for the design, equipment and operation. Prevention of nosocomial infections.

- 14. Lesson interactive acquaintance with the structure, organization of work and equipment equipping the Centers of hygiene and epidemiology.
- 15. Seminar lesson.
- 16. Final Test session on the results of the 1 st semester.
- 17. Test written exam for students who not accumulated the required points to get the desired end result, and then (if necessary) oral interview.