HYGIENE – CONSPECTUS – VI COURSE

1. Introduction in hygiene. Hygiene as a main prophylactic branch in medicine, Main components and relation with the other sciences.
2. Global ecological problems.
3.Air composition and air pollution. Sampling for determination of air pollution. Monitoring of air pollution.
4. Health effects of air pollution. Prevention and control of air pollution.
5.Dust (Particulates). Critical exposure factors. Biological reactions.
6. Hygienic characteristics of physical factors of the atmosphere. Climate and weather.
7. General approaches to measurement of atmospheric pressure, air temperature, humidity and air velocity.
8.Thermal comfort. Physiological methods for thermal comfort evaluation. Health effects of unfavorable thermal environment
9.Heat stress indices developed through subjective and objective testing of workers. Preventive measures and control of heat stress.
10. Hygienic requirement of water supply. Surveillance of drinking water quality.
11.Water sampling for physical and chemical examination and for bacteriological examination.
12.Purification of water. Disinfection of water.
13. Soil pollution. Health effect of the soil pollution.
14. Urbanisation - hygienic problems. Residential environment. Criteria for healthful housing.
15.Housing standards. Requirements and criteria of good lighting; measurement of lighting. Ventilation - types of ventilation and standards.
16.Hospital hygiene. Hygienic requirements to hospitals (clinics) with high epidemiological risk.
17. Prevention of hospital infections. Characteristics of the medical work.
18. Ionizing radiation. Radioprotection.
19. Sick building syndrome.
20. Healthful nutrition. Nutrition among different groups. Nutrition in children and adolescents. Nutrition in pregnancy and lactation. Nutritional requirements
21. Digestion and food absorption.
22. Macronutrients: Carbohydrates, Proteins, and Lipids. Requirements, functions, sources.
23. Micronutrients: Vitamins. Minerals. Requirements, functions, sources.
24.Food Surveillance. Foods of vegetable origin.Cereals. Pulses (legumes). Nuts. Vegetables. Fruits.
25.Food Surveillance. Foods of animal origin. Milk. Meat. Eggs. Fish.
26. Dietary Assessment of the Individual. Determination of the total energy expenditure, BMI and nutrients requirement.
27. Assessment of Nutritional Status. Nutritional Assessment by Anthrometric and Physiological Methods.
28. Assessment of Nutritional Status. Nutritional Assessment by Clinical, Anthrometric and Biochemical Methods.
29. Restaurants. Sanitation of Eating Places and Foodstore. Hygiene. Security.
30. Foodborne diseases. Prevention of the Bacterial Diseases.
31. Food Preservation. Low-temperature Preservation. Thermal Processing. Fermentation and Pickling. Chemical Preservation.
32. Diet and nutrition in disease. Nutrition Therapy for Diabetes, hepatitis.
33. Nutrition Therapy for Gastrointestinal Diseases – gastritis, ulcer, colitis, pancreatitis, cholelythiasis.
34. Nutrition Therapy for Cardiovascular Disease.
35. Nutrition Therapy for kidney diseases - nephrolithiasis
36. Food pollution. Pesticides. Heavy metals.
37. Food connected diseases. Obesity. Anaemia, Hypovitaminosises.Malnutrition.
38. Functional foods. Food Additives.
39. Occupational medicine, unfavourable factors of working condition. Occupational diseases. Work physiology.
40. Occupational medicine. Physical factors - noise, infra and - ultra sound, vibration, atmospheric pressure.
41. Occupational medicine. Chemical factors in working conditions - prophylactic measures. Hygienic characteristic of industrial and agriculture work.
42. Work physiology - capacity for physical work. Energy cost of work. Work classification. Methods for matching people and their work. Fatigue, Work/rest cycles.

43. Industrial Toxicology. Role of the physical and chemical properties of the substances. Action of toxic substances. Basis for workplace standards. Pesticides. Occupational and environmental pesticide exposure. Prevention.
44.Industrial hygiene. Recognition, evaluation and control of occupational health hazards. Inspection of the workplace - visit to plant.
45. Methods of physical and neurological assessment of children and adolescence.
46. Acceleration. Healthful knowledge.
47. Hygienic assessment of school program.
48. Main diseases in school age.
49. Geriatrics. Personal hygiene, lifestyle and nutrition of the elderly.
50. Hygienic norms, healthful way of live. Health risk assessment.

CONSPECTUS OF INFECTIOUS DISEASES – VI COURSE

1. Microbiological diagnosis of the infectious diseases
2. Etiological treatment of the bacterial diseases
3. Typhoid fever
4. Salmonellosis
5. Food poisoning
6. Botulism
7. Shigellosis
8. Escherichia coli infections
9. Cholera
10. Viral gastroenteritis
11. Brucellosis
12. Leptospirosis
13. Viral hepatitis A and E
14. Viral hepatitis B and D
15. Viral hepatitis C
16. Scarlet fever
17. Measles /Rubeola/
18. Rubella
19. Varicella
20. Diphtheria
21. Infectious mononucleosis
22. Influenza and other acute viral respiratory diseases
23. Pertussis
24. Mumps
25. Bacterial meningitis
26. Viral meningitis and meningoencephalitis
27. Infections caused by enteroviruses
28. Poliomyelitis
29. Legionellosis
30. Mediterranean spotted fever and Q – fever
31. Lime disease
32. Crimean – Congo hemorrhagic fever
33. Hemorrhagic fever with renal syndrome
34. Plague
35. Tularemia
36. Anthrax
37. Tétanos
38. Rabies
39. HIV infection and AIDS

CONSPECTUS OF EPIDEMIOLOGY – VI COURSE

1. Epidemic process - definition, constituents, forms. Epidemic process - definition, links, driving forces, types of intensity. Epidemic center.
2. Infectious process - the biological base of the epidemic process. Characteristics -degree of epidemiological significance of the forms of infectious process.
3. Source (origin) of infection: the patient - contagious period, epidemic importance. Zoonoses.
4. Source (origin) of infection: the carrier of infection, types of infections, duration, importance. Zoonoses.
5. Mode of transmission of infection — phases, types. Vehicles of transmission, Routes of transmission of infection. Classification of infectious diseases.
6. Vehicles of the transmission of infection – water, food objects in the immediate environment, soil and air.
7. Environmental factor- seasons and cycles of the infectious disease.
8. Social factor- types, ways of influence, significance.
9. Susceptibility of the population.
10. Specific immunoprophylaxis. Types of vaccines. Methods of application. Post-vaccination reactions and complications. Organization of immunizations
11. Immunization Schedule of Bulgaria.
12. Types of epidemics- air borne infections , arthropod- born infection, vehicles of transmission of infection, vehicle – born infections.water, milk and food as.
13. Epidemiological investigation - aims, stages, ways of carrying out, epidemiological analysis, epidemiological prognosis.
14. General prophylaxis and control measures in the epidemic center.
15. Measures in the epidemic centre - to the patient, to the environment. Diagnosis of epidemiological situation - epidemiological markers.
16. Disinfection and sterilization - definition, methods and characteristics of agents used.
17. Desinsection- definition, methods and characteristics of agents used.
18. Derattization - definition, methods and characteristics of agents used.
19. Noscomical infections.
20. Eradication and elimination of infectious diseases
21. Epidemiology and prevention of typhoid fever.
22. Epidemiology and prevention of shigellosis.
23. Epidemiology and prevention of viral hepatitis A and E.
24. Epidemiology and prevention of mumps
25. Epidemiology and prevention of measels.
26. Epidemiology and prevention of meningococcal infections. Meningococcal meningitis.
27. Epidemiology and prevention of streptococcal infection. Scarlet fever.
28. Epidemiology and prevention of rubella.
29. Epidemiology and prevention of pertussis
30. Epidemiology and prevention of Influenza and other acute viral respiratory diseases.
31. Epidemiology and prevention of diphtheria.
32. Epidemiology and prevention of viral hepatitis B, D and C.
33. Epidemiology and prevention of HIV infection and AIDS
34. Epidemiology and prevention of viral hemorrhagic fevers - Crimean-Congo - and haemorrhagic fever with renal syndrome.
35. Epidemiology and prevention of Mediterranean spotted fever
36. Epidemiology and prevention of plague, tularemia.
37. Epidemiology and prevention of Lime disease.
38. Epidemiology and prevention of rabies.
39. Epidemiology and prevention of tetanus.
40. Epidemiology and prevention of antrax.
41. Quarantine measures to combat infectious diseases. International Health Regulations.

CONSPECTUS OF SOCIAL MEDICINE - VI COURSE

1. Social medicine as a science. Public Health.
2. Social factors of health and disease. Socio-medical approach to health and disease.
3. Sociological methods in Medicine and health care.

4. Measuring disease frequency. Comparison of risks.
5. Analytical epidemiological studies.
6. Experimental epidemiological studies. Evidence based Medicine.
7. Disease prevention. Screening.
8. Health promotion.
9. Health culture and health education.
10. Demographic approach to population health. Demographic statics. Migration and health.
11. Population dynamics. Fertility and mortality.
12. Infant mortality, Under-5 mortality and Life expectancy.
13. Morbidity as a measure of population health.
14. Major diseases. DALYs. Major risk factors for chronic non-communicable diseases.
15. International health cooperation. International organizations, strategies and programs in the field of health.
16. Health as a social system. Health services.
17. Health legislation. Basic Health Laws - Health Act, Health Insurance Act, Health Care Facilities Act.
18. Main types of healthcare systems.
19. Health policy. Priorities of health policy in developed countries.
20. Organization, current status and trends of primary health care.
21. Organization, current status and trends of hospital care.
22. Organization, current state and trends of emergency care.
23. Health and health care for mothers and children. National programs for maternal and child health.
24. Health and health care for the elderly.
25. Medical expertise of working ability.