**MEDICAL UNIVERSITY - PLEVEN**

FACULTY OF MEDICINE

**DEPARTMENT OF INFECTIOUS DISEASES, EPIDEMIOLOGY, PARASITOLOGY AND TROPICAL MEDICINE**

**PROGRAM OF STUDY**

**IN**

**„INFECTIOUS DISEASE EPIDEMIOLOGY“**

**Sixth year MEDICAL STUDENTS -**

**TRAINEE DOCTORS**

**SPECIALTY OF MEDICINE**

# academic degree mASTER Professional qualification

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# Doctor of Medicine

**According to the unified state requirements:** mandatory

**According to the curriculum**: mandatory

**Academic year** : 6 th year, 11th and 12 th semester

**Total number of hours:** 15 hours of lectures

**Total credits:**

**Teachers:**

Assoc. Prof. Dr. Milena Karcheva, MD, PhD

Assoc. Prof. Dr. Tanya Petkova, MD, PhD

METHODS OF TRAINING:

- lecture presentation;

- discussion

- independent and group practical tasks;

• study of scientific literature;

• self-preparation.

KNOWLEDGE CONTROL AND ASSESSMENT:

- Final assessment by oral exam

**INFECTIOUS DISEASE EPIDEMIOLOGY**

**PROGRAMME OF THE LECTURES**

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| **№** | **TOPIC** | **Hours** |
| 1. | INFECTIOUS DISEASE EPIDEMIOLOGY. IMPORTANT DEFINITIONS. CHAIN OF INFECTION. | 3 |
| 2. | DISINFECTION. INSECT CONTROL. RODENT CONTROL. | 3 |
| 3. | SPECIFIC PROFILAXIS. NATIONAL IMMUNIZATION SCHEDULE. | 3 |
| 4. | EPIDEMIOLOGY OF RESPIRATORY AND INTESTINAL INFECTIONS. | 3 |
| 5. | EPIDEMIOLOGY OF BLOOD-BORN INFECTIONS. | 3 |

**THESES OF THE LECTURES:**

**1. INFECTIOUS DISEASE EPIDEMIOLOGY: IMPORTANT DEFINITIONS. CHAIN OF INFECTION /3 h/.**

Modern epidemiology. Infectious disease epidemiology: definitions, types of study (methodology) and related disciplines. Backgrounds and perspectives. Definitions used in infectious disease epidemiology (communicable disease, contagious disease, infection, contamination, infestation, exposure). Agent-host relation at community level (sporadic, outbreaks. epidemic, endemic, pandemic). Chain of infection. Factors and routes of transmission – definitions. Control and prevention.

**2. DISINFECTION. INSECT CONTROL. RODENT CONTROL./3 h/.**

Disinfection. Definition of terms. Types of disinfection – precurrent, concurrent, final). Methods for disinfection. Use of disinfectants. Monitoring of disinfection procedures. Definition of terms: vector-borne disease, vector control. Public health importance of lice, fleas, mosquitoes, flies, ticks, mites. Vector borne diseases – chain of infection. Vector control programmes. Methods for vector control. Use of insecticides. Animal reservoir of infection. Zoonoses. Rodents and human health. Rodent control. Recommedations for rodent control measures: eliminate rodents and reduce availability of food sources and nesting cites inside the buildings. Use of rodenticides.

**3. SPECIFIC PROFILAXIS. NATIONAL IMMUNIZATION SCHEDULE. /3h/.**

Sussceptible host. Host defenses – non-specific and specific defence mechanisms. Immunity – active, passive and herd immunity. Immunizing agents. Vaccines. Vaccines in use today. Preparations used for passive immunization. National immunization schedule.

**4. EPIDEMIOLOGY OF RESPIRATORY AND INTESTINAL INFECTIONS /3 h/.**

Problem statement. Epidemiological determinants. Prevention. Control of epidemics. Disaster implications. International measures (Influenza as a disease under surveillance by WHO). WHO control Programme. International measures. Epidemiology, prevention and control of intestinal infections. Preventive strategies. Vaccine in use to prevent hepatitis “A”. Poliomyelitis: WHO resolution for the global eradication of polio. Epidemiological determinants. Prevention – vaccines in use. International measures. WHO collaborating centres.

**5.** **EPIDEMIOLOGY OF BLOOD-BORN INFECTIONS /3 h/.**

Blood-borne diseases - epidemiology, prevention, control, surveillance. Problem statement. The types of viral hepatitis. World distribution. VHB, VHC and VHD. Epidemoilogical determinants – similarities and differences in etiology, epidemiology, clinical course. Approaches to prevention . Vaccines in use to prevent hepatitis B and D. Control of epidemics. Annual WHO reports on AIDS and STD. AIDS in India. Epidemiological determinants. Basic preventive strategies. Global and national control programmes.

**Prepared by:**

Assoc. Prof. Dr. Milena Karcheva, MD, PhD

Assoc. Prof. Dr. Tanya Petkova, MD, PhD