

**MEDICAL UNIVERSITY – PLOVDIV**  
**FACULTY OF MEDICINE**

**SYLLABUS**

**IN**

**EPIDEMIOLOGY, INFECTIOUS  
DISEASES, MEDICAL PARASITOLOGY  
AND TROPICAL MEDICINE  
(CYCLE OF INFECTIOUS DISEASES)**

**Approved by the Department Council on № 3/12.06.2025г.**

**Confirmed by the Faculty Council - Protocol № 6/18.06.2025**

**INFECTIOUS DISEASES**

## Syllabus

Discipline	Final exam/ semester	Auditorium classes				ECTS non-auditorium classes	ECTS total	Academic hours in years and semesters	
		Total	Lectures	Practices	ECTS			5 <sup>t</sup> year	
INFECTIOUS DISEASES	X							IX	X
		57	27	30	5.0	3.2	8.2*	8/14	9/16

\* Credits are for Epidemiology, Infectious Diseases, Medical Parasitology and Tropical  
Medicine

**DISCIPLINE:**  
„INFECTIOUS DISEASES ”

**TYPE OF DISCIPLINE ACCORDING TO THE UNIFORM STATE REQUIREMENTS:**

**Mandatory**

**LEVEL OF QUALIFICATION:**  
**Master /M/**

**FORMS OF TRAINING:**  
**Lectures, exercises, seminars**

**YEAR OF TRAINING:**  
**V year**

**DURATION OF TRAINING:**  
**2 semesters – IX, X**

**ACADEMIC HOURS:**  
**29 hours of lectures, 28 hours of exercise**

**TECHNICAL EQUIPMENT APPLIED IN THE TRAINING:**

- Clinical scenarios
- Video demonstrations
- Multimedia presentations
- Educational films

**Methods to Encourage Students' Creative Engagement**

- Participation in discussions and presentation of personal viewpoints
- Creation of presentations and student projects
- Use of multimedia, audio, and video materials
- Case solving and analysis of clinical data

- Development of diagnostic and therapeutic algorithms
- Practical resolution of clinical problems

#### **FORMS OF EVALUATION:**

- Written, oral, and practical exams
- Combined tests
- Ongoing (continuous) assessment
- Discussions and colloquiums
- Preparation of essays and reports
- Presentations and student projects
- Test-based assessment and analysis of clinical cases

#### **EVALUATION CRITERIA:**

Ongoing evaluation, elaboration of an abstract / thesis, etc. materials, colloquia Solving tests and cases

#### **ASPECTS OF EVALUATION CRITERIA:**

**Participation in discussions, evaluation of tests**

#### **SEMESTER EXAM:**

Yes / Entrance test, written exam, practical exam

#### **STATE EXAM:**

Yes

#### **LECTURER:**

**Habilitated lecturer from the Department of “Infectious Diseases and Parasitology”**

#### **DEPARTMENT:**

**Infectious diseases, parasitology and tropical medicine**

### **ANNOTATION**

**Clarification of the basic concepts in infectology. Characteristic features of the infectious disease, periods of course. The most common symptoms and syndromes - pathogenetic and clinical characteristics. Principles for diagnosis: clinical, laboratory, microbiological and virological methods of diagnosis. Differential diagnosis with infectious and non-infectious diseases. Treatment: classical and modern methods of treatment. Prevention / specific and non-specific**

### **BASIC AIMS OF THE DISCIPLINE**

1. Presentation of modern theoretical knowledge about infectious diseases - etiology, pathogenesis, clinical picture, laboratory tests, diagnosis, differential diagnosis, treatment and prevention. 2. Practical skills for collecting and interpreting the data from the anamnesis, physical examination and laboratory tests. Clinical thinking with a view to making a probable clinical diagnosis, building a differential diagnostic and therapeutic plan

### **EXPECTED RESULTS**

Upon completion of the training, students must have the following knowledge and skills:

- 1. In-depth history taking (including epidemiological and developmental).**
- 2. To know and be able to interpret the data from the anamnesis, the examination and the main laboratory indicators.**
- 3. To know the rules of collection, storage and transportation of biological materials for microbiological examination and the indications for their appointment (feces, cerebrospinal fluid, blood, throat secretions)**
- 4. To know and apply the principles of rational antimicrobial therapy. To know the main side effects of antibiotics. Be able to interpret antimicrobial resistance and select an appropriate antimicrobial. To know the main antiviral drugs.**
- 5. Acute viral hepatitis - be able to make a clinical diagnosis of acute viral hepatitis - to interpret serological markers in different types of hepatitis - to know the epidemiological and clinical features of the different types of VH - be able to make a differential diagnosis of jaundice syndrome (parenchymal, mechanical, hemolytic jaundice), as well as DD of viral hepatitis with other diseases with parenchymal jaundice 4 - prevention (non- and specific)**
- 6. Intestinal infections with diarrhea syndrome - to know the main causes of intestinal infections with diarrhea syndrome - be able to determine the different degrees of dehydration from clinical data - to know the principles of water-salt rehydration (oral, parenteral) - to know the indications for antimicrobial chemotherapy - to be able to make a diff. diagnosis with diarrheal syndrome in surgical diseases**
- 7. Acute CNS infections - to know the main causes of CNS infections - be able to detect the signs of meningeal irritation in different age groups - to know the technique of performing a lumbar puncture - to know the characteristics of the cerebrospinal fluid in purulent and aseptic meningitis - to know the preparations for the treatment of cerebral edema - to know the empirical antibiotic therapy for purulent meningitis of unspecified etiology - to know the characteristics of flaccid paralysis in polio**
- 8. Infectious exanthemas - to be able to make an accurate and complete description of the rash - to know the clinical and epidemiological characteristics of chickenpox, measles, scarlet fever - to know the behavior of a pregnant woman, contact of a sick person, suspected of having rubella - to know the infectious diseases with hemorrhagic rash - to know the principles of etiological treatment of chickenpox and scarlet fever**
- 9. Drip infections - to know the characteristics of diphtheria deposits - to know the clinical picture of infectious mononucleosis, the characteristic laboratory parameters and the serological diagnosis - to know the characteristics of whooping cough and antimicrobials for its treatment**
- 10. Zoonoses - be able to make a clinical diagnosis of erythema migrans (Lyme disease) - to know the peculiarities of serological reactions in Lyme disease - to know the oral antibiotic treatment of erythema migrans - to know the clinical picture of Marseille fever and its treatment - to know the non-specific prevention of tick-borne diseases**

### **LECTURES**

**LECTURE № 1 – 2 hours Infection. Infectious disease. Symptoms and syndromes. Salmonellosis. Typhoid Fever. 5**

**LECTURE № 2 – 2 hours Shigellosis. Cholienitis. Viral gastroenteritis.**

**LECTURE № 3 – 2 hours Cholera. Therapy of intestinal infections with diarrhea syndrome.**

**LECTURE № 4 – 2 hours Viral hepatitis: A, B, C, D, E, G V course,**

#### **X semester**

**LECTURE № 1 – 2 hours Acute respiratory diseases. Influenza. SARS CoV2 / 2020**

**LECTURE № 2 – 2 hours Infectious mononucleosis. Diphtheria. Mumps.**

**LECTURE № 3 – 2 hours Measles. Rubella. Chickenpox. Scarlet fever.**

**LECTURE № 4 – 2 hours Purulent meningitis. Meningococcal disease.**

**LECTURE № 5 – 2 hours Encephalitis. Polio. LECTURE**

**№ 6 – 2 hours Lyme disease. Rickettsiosis. Viral hemorrhagic fevers.**

**LECTURE № 7 – 2 hours HIV infection / AIDS.**

#### **Lecture program for tropical infectious diseases**

**LECTURE № 1 – 2 hours Exotic viral hemorrhagic fevers (Ebola. Lhasa. Hemorrhagic fever of the Rift Valley). Plague. Tularemia**

**LECTURE № 2 – 2 hours Exotic rickettsiosis: Spotted fever on the rocky mountains. Tsutsugamushi. Variola vera. Monkeypox - a possible biological weapon. Sap. Melioidosis.**

**LECTURE № 3 – 1 час Tetanus. Anthrax.**

#### **PRACTICES**

**EXERCISE № 1 – 2 hours Construction and mode of operation in an infectious disease clinic, personal protective equipment. History and status of an infectious patient. SARS CoV2 / 2020. Marseille fever. Ku fever.**

**EXERCISE № 2 – 2 hours Clinic of a patient with diarrhea syndrome. Shigellosis. Salmonellosis. Differential diagnosis of a patient with diarrhea syndrome.**

**EXERCISE № 3 – 2 hours Cholienitis. Viral gastroenteritis (rotavirus, norovirus). Treatment of a patient with diarrhea syndrome.**

**EXERCISE № 4 – 2 hours Test for intestinal infections with diarrhea syndrome. Summary.**

**EXERCISE № 5 – 2 hours Viral hepatitis - clinic, laboratory abnormalities.**

**EXERCISE № 6 – 2 hours Viral hepatitis. Complications. Acute liver failure. Diagnosis. Differential diagnosis, treatment. Test for acute viral hepatitis.**

**EXERCISE № 7 – 2 hours Influenza. Pertussis. Mumps. Virological diagnosis in inf. diseases.**

**Exercise program V course, X semester**

**EXERCISE № 1 – 2 hours Purulent meningitis. Meningococcal disease.**

**EXERCISE № 2 – 2 hours Serous / aseptic / meningitis. Poliomyelitis. Leptospirosis. Test for neuroinfections.**

**EXERCISE № 3 – 2 hours Infectious exanthemas - part I. Diseases with maculo-papulo-vesicular / chickenpox / and erythema / scarlet fever / rash.**

**EXERCISE № 4 – 2 hours Infectious exanthemas - part II. Diseases with maculopapular rash - Measles, Rubella. 7**

EXERCISE № 5 –2 hours Anginous syndrome / Infectious mononucleosis. Diphtheria. /  
Test for diseases with rash and anginal syndrome. Ku fever.  
EXERCISE № 6 –2 hours HIV infection / AIDS seminar.  
EXERCISE № 7 –2 hours Practical exam.

### **BIBLIOGRAPHY**

- 1. Textbook of infectious diseases. Yochev, Popivanova, Vertigovaya 2007**
- 2. Practical guide to infectious diseases, 2017.**
- 3. Symptoms and syndromes of infectious diseases. Genev et al., 2007**
- 4. Textbook of infectious diseases for physicians, 2014, editor Prof. R. Komitova**
- 5. Infectious diseases Clinical cases and more, 2018**
- 6. Infectious Disease - short course, 2019**

### **CONSPECTUS**

#### **Section 1**

- 1. Infection, infectious process (definition, forms). Infectious disease – definition, phases and clinical forms**
- 2. Syndromes and symptoms in infectology**
- 3. Antibacterial therapy in infectious diseases**
- 4. Antiviral and immunotherapy in infectious diseases**
- 5. Pathogenetic therapy in infectious diseases – rehydration and correction of electrolyte imbalance, therapy for cerebral edema**
- 6. Salmonellosis**
- 7. Food poisoning caused by Staphylococcus and other microorganisms**
- 8. Botulism**
- 9. Shigellosis**
- 10. Colienteritis**
- 11. Acute viral hepatitis A and E**
- 12. Acute viral hepatitis B, C and D**
- 13. Coma hepatica - pathogenesis, clinical manifestations, therapy.**
- 14. Scarlet fever**
- 15. Infectious mononucleosis**
- 16. Measles**
- 17. Rubella**
- 18. Chickenpox**
- 19. COVID-19**
- 20. Influenza**

- 21. Parainfluenza, Adenoviroses, RS-viroses**
- 22. Pertussis (whooping cough) and Parapertussis**
- 23. Parotitis epidemica (mumps)**
- 24. Meningococcal disease**
- 25. ECHO and Coxsackie's viral infections**
- 26. Neuroinfections caused by Herpes Simplex virus and Arboviruses (West-Nile and Tick-borne encephalitis)**
- 27. HIV/AIDS**

**Section 2**

- 1. Viral hemorrhagic fevers – common characteristic. Lassa fever**
  - 2. Yellow fever**
  - 3. Ebola and Marburg HFs**
    - 4. Dengue**
    - 5. Cholera**
  - 6. Epidemic (louse-borne) typhus. Endemic (murine) typhus**
    - 7. Smallpox. Monkeypox**
    - 8. Plague**
  - 9. Travellers' diarrhea (TD)**
    - 10. Leprosy**
    - 11. Diphtheria**
    - 12. Poliomyelitis**
  - 13. Typhoid fever (typhus abdominalis). Paratyphus A, B and C**
    - 14. Brucellosis**
    - 15. Leptospirosis**
  - 16. Mediterranean Spotted Fever (Febris Marsiliensis)**
    - 17. Q fever**
    - 18. Lyme disease**
  - 19. Crimean-Congo hemorrhagic fever**
  - 20. Hemorrhagic fever with renal syndrome**
    - 21. Anthrax. Malignant pustula**
      - 22. Tetanus**
      - 23. Rabies**
      - 24. Tularemia**

**Head of department: Associate Professor I. Baltadzhiev, MD, PHD**