

**MEDICAL UNIVERSITY-PLOVDIV FACULTY OF
MEDICINE**

PROGRAM

ON

**EPIDEMIOLOGY, INFECTIOUS DISEASES,
MEDICAL PARASITOLOGY AND
TROPICAL MEDICINE**

(CYCLE OF INFECTIOUS DISEASES)

Accepted by the Department Council on №3/19.04.2022

Approved by the Faculty Council with a Protocol №7/13.07.2022

CYCLE OF INFECTIOUS DISEASES

Discipline	Final exam/ semester	Auditorium classes				ECTS non-auditorium classes	ECTS total	Academic hours in years and semesters	
		Total	Lectures	Practices	ECTS			5 th year	
INFECTIOUS DISEASES	X							IX	X
		57	27	30	5.0	3.2	8.2*	8/14	19/16

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

Name of the discipline:

„INFECTIOUS DISEASES ”

Type of discipline according to EDI:

Mandatory

Level of education:

Master /M/

Forms of education:

Lectures, exercises, seminars

Training course:

V course

Duration of training:

2 semesters – IX, X

Hours:

29 hours of lectures, 28 hours of exercises

Teaching aids:

Multimedia presentations, discussions, solving tests and case studies

Forms of assessment:

Ongoing evaluation, elaboration of an abstract / thesis, etc. materials, colloquia

Solving tests and cases

Formation of the assessment:

An average current grade is formed for each semester

Aspects in the formation of the assessment:

Participation in discussions, evaluation of tests

Semester exam:

Yes / Entrance test, written exam, practical exam

State Examination:

Yes

Leading lecturer:

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

Department:

Infectious diseases, parasitology and tropical medicine

➤ ANNOTATION

Abstract: 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 /.

➤ MAIN TASKS OF THE CURRICULUM

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

- 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 - THESIS**

Infectious Diseases Lecture Program

V course, IX semester

LECTURE № 1 – 2 hours

Infection. Infectious disease. Symptoms and syndromes. Salmonellosis. Typhoid Fever.

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 uac

Tetanus. Anthrax.

➤ **EXERCISE - THESIS**

**Exercise program
V course, IX semester**

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.

EXERCISE № 7 –2 hours

Test for acute viral hepatitis. Laboratory constellations in infectious diseases (intestinal infections with diarrheal syndrome, viral hepatitis, inflammatory constellations).

**Exercise program
V course, X semester**

EXERCISE № 1 –2 hours

Influenza. Pertussis. Mumps. Virological diagnosis in inf. diseases.

EXERCISE № 2 –2 hours

Purulent meningitis. Meningococcal disease.

EXERCISE № 3 –2 hours

Serous / aseptic / meningitis. Poliomyelitis. Leptospirosis. Test for neuroinfections.

EXERCISE № 4 –2 hours

Infectious exanthemas - part I. Diseases with maculo-papulo-vesicular / chickenpox / and erythema / scarlet fever / rash.

EXERCISE № 5 –2 hours

Infectious exanthemas - part II. Diseases with maculopapular rash - Measles, Rubella.

EXERCISE № 6 –2 hours

Anginous syndrome / Infectious mononucleosis. Diphtheria. /. Test for diseases with rash and anginal syndrome. Ku fever.

EXERCISE № 7 –2 hours

HIV infection / AIDS seminar.

EXERCISE № 8 –2 hours

Practical exam.

➤ **LITERATURE**

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

➤ **SUMMARY OF SEMESTERIAL EXAMINATION-Infectious Diseases**

1. Infection, infectious process / definition, forms /. Role of the micro- and macro-organism, role of the environment.
2. Infectious disease - definition, phases and features in the course.
3. Antibacterial therapy in infectious diseases.
4. Immunotherapy in infectious diseases.
5. Pathogenetic treatment of infectious diseases: water-salt rehydration, dehydrating therapy.
6. Typhoid fever. Paratyphoid A and B.
7. Salmonellosis.
8. Staphylococcal and other food poisoning infections.
9. Botulism.
10. Shigellosis.
11. Cholera.
12. Cholienteritis.
13. Brucellosis.
14. Leptospirosis.
15. Viral hepatitis - causes, mode of infection and main pathogenetic mechanisms in hepatitis A, E, B, C, D, G.
16. Viral hepatitis - clinical picture, diagnosis, differential diagnosis and therapy.
17. Hepatic coma - pathogenesis, clinic, therapy.
18. Diphtheria.
19. Scarlet fever.
20. Measles.
21. Rubella.
22. Infectious mononucleosis.
23. Chickenpox.
24. Influenza.
25. Parainfluenza. Adenoviruses. RS-expressions.
26. Pertussis and pertussis.
27. Mumps.
28. Meningococcal disease.
29. Polio. ECHO and coxsackie virus infections.

30. Encephalitis - herpetic, seasonal.
31. Marseille fever.
32. Ku fever.
33. Lyme disease.
34. Crimean hemorrhagic fever.
35. Hemorrhagic fever with renal syndrome.
36. Anthrax.
37. Tetanus.
38. Rage.
39. HIV / AIDS.
40. Tularemia.

➤ **SUMMARY FOR SEMESTERIAL EXAM-tropical diseases**

1. Viral hemorrhagic fevers - a common feature. Hunt viral lung syndrome.
2. Hemorrhagic fever of the Rift Valley.
3. Argentine and Bolivian hemorrhagic fevers.
4. Hemorrhagic fever Lassa.
5. Yellow hemorrhagic fever.
6. Hemorrhagic fevers Ebola and Marburg.
7. Dengue. Dengue hemorrhagic fever. Dengue shock syndrome.
8. Smallpox / brief data /. Monkeypox. Cowpox smallpox.
9. Typhoid fever - epidemic (lice) and endemic (rat).
10. Spotted fever on the rocky mountains.
11. Vesicular fever.
12. Tsutsugamushi fever (Japanese river fever).
13. Volyn (Trench) fever.
14. Typhoid fever - epidemic (lice) and endemic (tick).
15. Melioidosis. Sap.
16. Leprosy - clinical picture and clinical variants.
17. Plague.
18. Diarrhea of travelers.

➤ **SUMMARY FOR STATE EXAM - infectious diseases**

1. Infection, infectious process / definition, forms /, infectious disease.
2. Symptoms and syndromes of infectious diseases.
3. Basic clinical and laboratory tests for infectious diseases.
4. Microbiological and virological research in infectious diseases.
5. Etiological treatment of infectious diseases - antibiotic, chemotherapeutic and immunobiological.
6. Pathogenetic treatment of infectious diseases - principles of dehydrating and rehydrating therapy.
7. Typhoid fever, paratyphoid "A" and paratyphoid "B".
8. Salmonellosis.
9. Food poisoning.
10. Botulism.
11. Shigellosis.
12. Cholienteritis.
13. Cholera.
14. Brucellosis.
15. Leptospirosis.
16. Viral hepatitis type "A" and type "E".

17. Viral hepatitis type "B" and type "E".
18. Viral hepatitis type "C" and type "G".
19. Acute liver failure in viral hepatitis.
20. Diphtheria.
21. Scarlet fever.
22. Cranberry.
23. Rubella and hazelnut.
24. Infectious mononucleosis.
25. Influenza and ARI.
26. Pertussis and pertussis.
27. Mumps.
28. Meningococcal disease.
29. Polio.
30. Coxsackie and ECHO viral infections.
31. Plague.
32. Tularemia.
33. Typhoid fever - epidemic and endemic.
34. Ku fever.
35. Marseille fever.
36. Herpes simplex and seasonal (arboviral) encephalitis.
37. Recurrent typhus - lice and ticks.
38. Lyme disease.
39. Crimean hemorrhagic fever.
40. Hemorrhagic fever with renal syndrome.
41. Yellow fever.
42. Papatation fever. Dengue.
43. Anthrax.
44. Tetanus.
45. Rage.
46. HIV / AIDS