

**MEDICAL UNIVERSITY – PLOVDIV  
FACULTY OF MEDICINE**

**PROGRAMME  
IN  
INFECTIOUS DISEASES, MEDICAL PARASITOLOGY AND TROPICAL MEDICINE**

Approved by the Department Council on 28.05.2020

Confirmed by the Faculty Council - Protocol №5/08.07.2020

**CYCLE OF INFECTIOUS DISEASES**

**Syllabus**

Discipline	Final exam/ semester	Academic hours				Academic hours in years and semesters	
		Total	Lectures	Practices	ECTS	1 <sup>st</sup> year	
						1 <sup>st</sup> sem.	2 <sup>nd</sup> sem.
Infectious diseases Tropical diseases Parasitology	II semester	55	27	28		2/2	2/2

**DISCIPLINE:**

Infectious diseases

Tropical diseases

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

Mandatory

**LEVEL OF QUALIFICATION:**

Master / M /

**FORMS OF TRAINING:**

Lectures, practicals, seminars

**YEAR OF TRAINING:**

Fifth

**DURATION OF TRAINING:**

2 semesters - IX, X

**ACADEMIC HOURS:**

27 hours of lectures, 28 hours of exercises

**TECHNICAL EQUIPMENT APPLIED IN THE TRAINING:**

Multimedia presentations, discussions, tests and case studies

**FORMS OF EVALUATION:**

Ongoing evaluation, colloquia

**EVALUATION CRITERIA:**

An average grade is formed for each semester

**ASPECTS OF EVALUATION CRITERIA:**

Participation in discussions, evaluation of the tests

**SEMESTER EXAM: ( joint exam with epidemiology)**

Yes / entry test, practical exam, written exam

**STATE EXAM:**

Yes

**LECTURERS:**

Habilitated lecturers from the Department of Infectious Diseases and Parasitology

**DEPARTMENTS**

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

**ANNOTATION**

Abstract: Clarification of the basic concepts in infectology. Characteristic features of the infectious disease, periods of the diseases. The most common symptoms and syndromes - pathogenetic and clinical characteristics. Principles of 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. To present the modern theoretical knowledge of infectious diseases - etiology, pathogenesis, clinical picture, laboratory tests, diagnosis, differential diagnosis, treatment and prevention.
2. To introduce students in practical skills of collecting and interpreting the data from the history of a patient, physical examination and laboratory tests. To represent clinical thinking and presuming a probable clinical diagnosis, making 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 history taking, examination and the main laboratory parameters
- 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.Viral hepatitis**

- to be able to ake a clinical diagnosis of acute viral hepatitis
- to be able to interpret serological markers in different types of hepatitis
- to know the epidemiological and clinical features of the different viral hepatitis types
- to be able to make a differential diagnosis of jaundice syndrome (parenchymal, mechanical, hemolytic jaundice), as well as to differentiate viral hepatitis with other diseases with parenchymal jaundice
- to know prevention (non- and specific)

### **6.Infections with diarrhea syndrome**

- to know the main causes of intestinal infections with diarrhea syndrome
- to be able to determine the different degrees of dehydration from clinical data
- to know the principles of water-salt replacement (oral, parenteral)
- to know the indications for antimicrobial chemotherapy
- to be able to make a diff. diagnosis with diarrheal syndrome in surgical disease

### **7. 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 characteristics of the cerebrospinal fluid in purulent and aseptic meningitis
- to know how to treat cerebral edema
- to know the empirical antibiotic therapy for purulent meningitis
- to know the characteristics of flaccid paralysis in polio
- to know the cardinal symptoms of tetanus

### **8. *infectious exanthemas***

- be able to make an accurate and complete description of rash
- to be aware of clinical and epidemiological characteristics of chickenpox, measles, scarlet fever
- to know the management of a pregnant woman, exposed to rubella-like rash
- to know the infectious diseases with hemorrhagic rash
- be able to describe the characteristics of diphtheria pseudomembrans
- now the characteristics of whooping cough

### **8. Zoonoses**

- to be able to make a clinical diagnosis of erythema migrans (Lyme disease)
- to know the peculiarities of serological tests in Lyme disease
- to know the oral antibiotic treatment of erythema migrans
- to know the clinical picture of MSF and its treatment

to know the non-specific prevention of tick-borne diseases

### **Lectures:**

#### **WINTER SEMESTER**

1. Infection, infectious diseases, Symptoms and syndromes. Salmonellosis, abdominal fever
2. Shigellosis, colienteritis, Viral gastroenteritis .
3. Cholera. Therapy of infectious diarrhea
4. Viral hepatitis A, B, C, D, E

#### **SUMMER SEMESTER**

5. Influenza. Acute viral respiratory disease. SARS-CoV-2
6. Infectious mononucleosis, Diphtheria, Mumps
7. Measles. Rubella. Scarlet Fever. Chicken pox
8. Meningitis purulenta/ aseptica. Meningococcal disease
9. Encephalitis. Poliomyelitis. Tetanus
10. Lyme disease. Rickettsioses. Mediterranean spotted fever . Viral hemorrhagic fevers: CCHF, HFRS
11. HIV infection/AIDS. Anthrax.

### **Practicals**

#### **Exercise program V course, IX semester**

##### **EXERCISE № 1-2 hours**

Introduction. Mode of operation in infectious disease clinic, personal protective equipment. History taking and physical examination of infectious disease patient SARS CoV2 / 2020. Marseille 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**

Cholienteritis. Viral gastroenteritis (rotavirus, norovirus). Treatment of a patient with diarrhea syndrome.

##### **EXERCISE № 4 –2 hours**

**Infectious diarrhea test . 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**

**Viral hepatitis test .** Laboratory constellations in infectious diseases (intestinal infections with diarrheal syndrome, viral hepatitis, inflammatory constellations).

#### **V course, X semester**

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

**EXERCISE № 2 -2 hours** Viral (aseptic) meningitis. Poliomyelitis. Leptospirosis. Test on neuroinfections.

**EXERCISE № 3- 2 hours** Infectious exanthema - part one. Chickenpox and Scarlet fever.

**EXERCISE № 4 -2 hours** Infectious exanthema – part two. Diseases with maculo-papular rash – Measles, Rubella.

**EXERCISE № 5 - 2 hours** Anginal syndrome / Mononucleosis. Diphtheria./ Test on diseases with rash and anginal syndrome.

**EXERCISE № 6 – 2 hours** HIV infection / AIDS – Workshop.

**EXERCISE № 7 - 2 hours** Practical exam.

### **Bibliography**

1. Infectious diseases Clinical cases and more, 2018
2. Infectious Disease – a clinical short course, Fr. Southwick, 2020

### **CONSPECTUS – INFECTIOUS DISEASES**

1. Infection, Infectious process (definition, forms)
2. Infectious disease – definition, phases and clinical features
3. Etiological treatment in infectious diseases ( antibiotics)
4. Etiological treatment in infectious diseases ( immunotherapy)
5. Pathogenetic treatment in infectious diseases, water electrolyte rehydration, therapy against brain oedema
6. Typhoid fever (enteric fever ). Paratyphus A, B and C
7. Salmonellosis.
8. Food poisoning caused by Staphylococcus. Botulism
10. Shigellosis
11. Cholera
12. Colienteritis
13. Brucellosis
14. Leptospiroses
15. Acute viral hepatitis – causes, mode of transmission and main pathogenetic mechanisms of hepatitis A, E, B, C, D
16. Acute viral hepatitis – clinical manifestations, diagnosis, differential diagnosis and therapy
17. Comma hepatica- pathogenesis, clinical manifestation, therapy
18. Diphtheria
19. Scarlet Fever
20. Measles
21. Mononucleosis infectiosa
22. Rubella.
23. Chicken pox.
24. Influenza.
25. Parainfluenza, Adenovirus, RS- viral infections. SARS-CoV-2
26. Pertussis (whooping cough) and Parapertussis.
27. Mumps (Parotitis epidemica).
28. Meningococcal Disease.
29. Poliomyelitis. ECHO and Coxsackie’s viral infections.
30. Encephalitis,(HSE)
31. Mediterranean spotted fever (Marseilles fever).+ Q fever
33. Lyme disease.
34. Crimean- Congo hemorrhagic fever.
35. Hemorrhagic fever with renal syndrome
36. Anthrax.
37. Tetanus

38. Rabies.
39. HIV infection /AIDS
40. Tularaemia

### **Lectures tropical disease** **SUMMER SEMESTER**

1. Dengue . Typhus exanthematicus (epidemic and endemic). Rocky Mountains spotted fever Typhus exanthematicus (epidemic and endemic)
2. Hemorrhagic fevers Ebola, Lassa, Yellow fever , Plague

### **Conspectus - Tropical infectious disease**

#### 1 Conspectus - Tropical infectious disease

1. Viral hemorrhagic fever – common characteristics. Hanta viral pulmonary syndrome
2. Rift Valley Fever
3. Argentine hemorrhagic fever (AHF) and Bolivian hemorrhagic fever (BHF).
4. Febris haemorrhagica Lassa (Lassa fever)
5. Yellow fever
6. Febris haemorrhagica Ebola, Ebola fever (Ebola HF) and Febris haemorrhagica. Marburg (Marburg disease).
7. Dengue hemorrhagic fever
8. Smallpox, Variola vera
9. Typhus exanthematicus (epidemic and endemic)
10. Rocky Mountains spotted fever
11. Gamaso-rickettsiosis vesiculosa, Rickettsialpox
12. Rickettsiosis Tsutsugamushi, Scrub typhus, Japanese fever
13. Rickettsiosis wolhynica (Trench fever). Rickettsiosis enedemica murina, Murine typhus
14. Typhus recurrentis epidemic and endemic (acarina)
15. Lepra (Hansen disease) – clinical manifestation and variants
16. Plague
17. Travellers' diarrhea (TD)

### **Bibliography**

- Infectious diseases a clinical short.couse, M. Stoycheva, O. Boykinova, I. Baltadjiev and all., 2019
- Infectious diseases a clinical short.couse, Fr.Southwick,,2020.
- Oxford textbook of medicine, 6th ed.,2020
- Medical Microbiology & Immunology A Guide to Clinical Infectious Diseases, 2018McGrawHill
- Infectious diseases clinical cases and more, 2018