INTERNATIONAL HIGHER SCHOOL OF MEDICINE

Infectious Diseases Department

SYLLABUS
Infectious Diseases

2025-2026 academic year
for students of medical faculty
5 course IX semester, groups 1-50
5,0 credits (150 h, including auditorial 90 h, independent work – 60 h)

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Venue: Republican Clinical Infectious Diseases Hospital, 70 L. Tolstoy str.
Department of Infectious Diseases of IHSM

The Syllabus is considered
at the meeting of the department of infectious diseases
Protocol № 2 dated 23/08/2024
Head of the department A.Z. Kutmanova

Course Objective: the development of the discipline Infectious diseases: the formation of knowledge and skills, the development of practical skills that provide clinical diagnosis of the most common infectious diseases, as well as quarantine infections, the rational use of laboratory and instrumental methods of examination of patients, the appointment of adequate etiotropic and pathogenetic treatment, including elements of emergency therapy.

After study of the discipline the student must:

Knowledge:

1. The main clinical symptoms and syndromes of infectious diseases
2. Clinical and epidemiological indications for hospitalization of infectious patients
3. Methods of diagnosis of infectious diseases
4. Complications and outcomes of infectious diseases
5. Principles of therapy of infectious patients
6. Urgent conditions in infectious diseases

Skill:

1. To collect anamnesis from a patient with an infectious disease
2. Collect a directed epidemiological history
3. To carry out a clinical examination of the patient
4. Establish a preliminary diagnosis
5. Make a plan for the examination of the patient
6. Evaluate the results of laboratory studies (bacteriological, serological and other studies)
7. Prescribe adequate etiotropic, pathogenetic and symptomatic therapy for specific infectious diseases/

Attitude:

1. Possess the technique of taking material from the patient for bacteriological, virological, serological, etc. studies (blood, feces, urine, vomit, mucus from the nose and throat)
2. Carry out intradermal diagnostic and allergic tests and evaluate their results
3. Master the technique of gastric and intestinal lavage
4. Master the methodology of rehydration therapy
5. Master manipulations for emergency care (stopping bleeding, mouth-to-mouth, mouth-to-nose artificial respiration, cleaning the upper respiratory tract, indirect heart massage)
6. Own the technique of using personal protective equipment (anti-plague suit 1, 2,3,4).

Pre-requisites. Anatomy (macro-microanatomy), Normal physiology, Pathological anatomy, Pathological physiology, Microbiology, Virology and Immunology, Propedotherapy, General surgery, Neurology, Dermatovenerology

Post-requisites. Family medicine, polyclinic therapy.

THEMATIC PLAN OF LECTURES

№	Theme of lecture	Hours	Date
1	Introduction	2	25.08.-31.05.
2	Enteric fever	2	25.08.-31.05.
3	Food poisoning, Salmonellosis, Botulism, Shigellosis	2	25.08.-31.05.
4	Viral hepatitis A, E	2	25.08.-31.05.
5	Viral hepatitis B, C, D	2	25.08.-31.05.
6	HIV-infection	2	25.08.-31.05.
7	Flu and other acute respiratory infections	2	25.08.-31.05.
8	Meningococcal infection	2	25.08.-31.05.
9	Herpetic infection	2	25.08.-31.05.
10	Brucellosis, Yersiniosis, Anthrax	2	25.08.-31.05.
11	Tetanus, Rabies	2	25.08.-31.05.
12	Rickettsial infection	2	25.08.-31.05.
13	Plague	2	25.08.-31.05.
	Total hours:	**26**	

THEMATIC PLAN OF PRACTICAL CLASSES

№	Theme of practical class	Hours	Date
Unit 1			
1	Introduction to infectious diseases. Enteric fever	4	25.08-30.05
2	Food poisoning. Non-typhoid salmonella**.**	2	25.08-30.05
3	Botulism.	2	25.08-30.05
4	Shigellosis. E.coli infection	2	25.08-30.05
5	Helminthes	2	25.08-30.05
6	Passing of Unit №1	2	25.08-30.05
Unit 2			
7	Viral hepatitis A and E	2	25.08-30.05
8	Viral hepatitis B, D	2	25.08-30.05
9	Viral hepatitis C	2	25.08-30.05
10	HIV-infection	4	25.08-30.05
11	Passing of Unit №2	2	25.08-30.05
Unit 3			
12	Flu and other acute respiratory infections.	4	25.08-30.05
13	Covid-19	2	
14	Meningococcal infection	4	25.08-30.05
15	Herpetic infection. Smallpox. Monkey pox	2	25.08-30.05
16	Passing of Unit №3	2	
Unit 4			
17	Brucellosis. Yersinia infection	4	25.08-30.05
18	Anthrax	2	25.08-30.05
19	Rabies. Tetanus	2	25.08-30.05
20	Passing of Unit №4	2	25.08-30.05
Unit 5			
21	Rickettsial infection	4	25.08-30.05
22	Indian tick typhus	2	
23	Plague	2	25.08-30.05
24	Tick-born encephalitis	2	25.08-30.05
25	Borrelia infection	2	25.08-30.05
26	Passing of Unit №5	2	25.08-30.05
	Total hours:	**64**	

THEMATIC PLAN OF INDEPENDENT WORK OF STUDENTS

№	Theme of independent work	Hours	Date
Unit №1 Introduction. Intestinal infections (10hrs)			
1	Differential diagnosis of diarrheal syndrome. Fill in the table.	2	25.08-31.05
2	Make a presentation on helminths (nematodes, cestodoses, trematodes, protozooses)	2	25.08-31.05
3	Working with literature	6	25.08-31.05
Unit №2 Hemocontact infections (12 hrs)			
4	Make a presentation on HIV antiretroviral therapy	2	25.08-31.05
5	Differential diagnosis of enteral and parenteral hepatitis. Fill in the table	2	25.08-31.05
6	Hepatitis caused by other viruses (herpesviruses). Make a presentation.	2	25.08-31.05
7	Working with literature	6	25.08-31.05
Unit №3 Airborne infections (14 hrs)			
8	Herpes infections (HSV, herpes virus type 6, type 7, type 8). Make a presentation.	2	25.08-31.05

9	Differential diagnosis of smallpox and monkey pox. Fill in the table.	2	25.08-31.05
10	Differential diagnosis of influenza, ARVI and COVID-19. Fill in the table.	2	25.08-31.05
11	Complications of Meningococcal infection (cerebral edema, septic shock). Make a presentation.	2	25.08-31.05
12	Working with literature	6	25.08-31.05
Unit №4 Zoonotic infections (12 hrs)			
13	Leptospirosis. Make a presentation.	2	25.08-31.05
14	Listeriosis. Make a presentation.	2	25.08-31.05
15	Atypical forms of rabies. Make a presentation.	2	25.08-31.05
16	Working with literature	6	25.08-31.05
Unit №5 Vector-borne infections (12 hrs)			
17	Differential diagnosis of tick-borne and mosquito-borne encephalitis. Fill in the table.	2	25.08-31.05
18	Differential diagnosis of rickettsial infection. Fill in the table.	2	25.08-31.05
19	Differential diagnosis of cutaneous and pulmonary forms of plague, anthrax.Fill in the table.	2	25.08-31.05
20	North Asian tick-borne rickettsiosis	2	25.08-31.05
21	Working with literature	4	25.08-31.05
	TOTAL	**60**	

Recommended reading for the discipline:

Basic:

1. E. Bennett, R.Dolin, M.J. Blaser. Mandell Douglas and Bennett's Infectious Disease Essentials – 1st Edition. 2017
2. Spec, G.V. Escota, C. Chrisler, B.Davies. Comprehensive Review of Infectious Diseases – 1st Edition. 2019
3. Harrison's, Dennis L.Kasper, Anthony S. Fauci. Infectious Diseases. 2014.
4. Jonathan Cohen, Steven M. Opal, William G. Powderly. Infectious diseases. 2017.
5. Elaine C. Jong and Dennis L. Stevens Netter's. Infectious diseases. 2012.

Additional:

1. The University of Pennsylvania "Practice Guidelines for the Diagnosis and Management of Infectious Diarrhea", 2017.
2. Ministry of Health and Family Welfare "National Guidelines for HIV "Care and Treatment", 2021.
3. Kutmanova A.Z., Buranchieva A.A., Omurkulova B.I., Kamchibekova A.A. Methodical recommendations for medical students, «Typhoid fever», 2018.
4. Kutmanova A.Z., Buranchieva A.A., Omurkulova B.I., Kamchibekova A.A. Methodical manual: "Herpetic infections" 2018

Grading policy and procedures for all types of work

For the period of studying the discipline, the student gains points for the relevant parameters (per unit):
current score - 40 points
independent work - 20 points
control score (final assessment of knowledge per unit) - 40 points
Maximum score - 100 (40+20+40)

Grading system for student's achievements

Gradingcriteriaperdiscipline				
Maximumscore	**Intervals**			
	«unsatisfactory»	**«satisfactory»**	**«good»**	**«excellent»**
Current control - 40	0-23	24-30	31-35	36-40
Interval description	Does not perform the task, does not know and does not understand the	Does not complete the task in full, has gaps in the	Performs the task in full, knows the lecture material,	Performs the task in full, easily applies knowledge and skills

	lecture material of the lesson, which prevents further assimilation of the program; cannot apply the acquired knowledge to solving situational tasks, test questions. Does not answer the questions of the teacher During the examination of the patient does not have practical skills	assimilation of lecture material, has difficulties in applying knowledge to solve situational problems, test questions; does not fully and accurately answer the teacher's questions. When examining a patient, he has little practical skills	but sometimes makes mistakes when solving situational tasks and test questions, understands the main content of the lecture material, gives correct answers to the teacher's questions. During the examination of the patient, he partially possesses practical skills	in solving situational tasks and test questions, rarely makes mistakes, gives complete and correct answers to the teacher's questions. When examining a patient, he fully possesses practical skills
Independent work - 20	0-11	12-15	16-17	18-20
Interval description	Presentation, report, table, situational task are missing	The content of the presentation, report, tables partially correspond to the given topic, the sequence of presentation of theoretical questions is broken: etiology, pathogenesis, epidemiology, clinic, differential diagnosis, laboratory diagnostics, treatment and prevention. Situational tasks contain little description of the clinical case	The content of the presentation, report, tables do not fully correspond to the given topic, the sequence of presentation of theoretical issues (etiology, pathogenesis, epidemiology, clinic, differential diagnosis, laboratory diagnostics, treatment and prevention) is not fully preserved. Situational tasks do not fully contain a description of a clinical case	The content of the presentation, report, tables correspond to the given topic, the sequence of presentation of theoretical questions (etiology, pathogenesis, epidemiology, clinic, differential diagnosis, laboratory diagnostics, treatment and prevention) is completely preserved. Situational tasks contain a description of the entire clinical case
Control work (module) - 40	0-23	24-30	31-35	36-40
Interval description	Does not know the answers to test questions and situational tasks	Poorly knows the answers to test questions and situational tasks	Knows the answers to test questions and situational tasks well	Perfectly knows the answers to test questions and situational tasks

Conduct Policy: (lateness, absence, behavior in the auditorium, late submission of work).
- Punctuality and completion of tasks.
- Mandatory attendance of classes.
- Attending class in a clean medical uniform.
- Eliminating conversations on a cell phone in the classroom.
- Active participation in the learning process.
- Doing homework on time.
- Academic detention at the time specified by the teacher.

For violations of the Conduct Policy, the total points for discipline might be reduced to 1-10 points.

Academic Ethics Policy.
- Be tolerant, respect the opinions of others.

- Formulate objections in the correct form.
- Constructively support feedback in all classes.
- Plagiarism and other forms of dishonest work are unacceptable. Plagiarism includes the following: the absence of references when using printed and electronic materials, quotes, thoughts and works of other authors or students.
- Prompting and cheating during tests, exams, classes is unacceptable as well as passing an exam for another student, unauthorized copying of materials.

For violations of the Academic Ethics Policy, the total points for the discipline may be reduced to 1-10 points.

Guidelines for the lessons of the discipline

UNIT №1«Intestinal infections»

Content of Unit № 1

Class 1

Key questions covered in Lecture №1: Introduction(2 hrs)

1. The general pathology of infections. Infectious diseases as an independent scientific and clinical discipline.
2. Definition of the "infection", "infectious process", "infectious disease". Regularities of the development of the infectious process.
3. The course of an infectious disease, its cycles.
4. Acute and chronic infectious diseases. Role of immunity and allergy in the infectious disease.
5. Age features of the course of infectious diseases.
6. Laboratory tests: virological, bacteriological, serological, parasitological.
7. Treatment of infectious patients.

Class 2

Key questions covered in Practice class №1: Introduction. Typhoid and paratyphoid fever (2 hrs)

1. To demonstrate the structure and mode of hospital infectious diseases.
2. Regulations of the hospitalization the patient with infectious disease.
3. Quarantine infection and the patients management.
4. Prevention of infectious diseases
5. Clinical manifestations in the incubation period, in the period of height of illness, decline and recovery periods.
6. Complications.
7. Differential diagnostics.
8. Bacteriological and serological tests of diagnostics.
9. Treatment.
10. Prevention.

Recommended reading for the class:

[1] pp. 763–798
[2] pp. 371–427
[1] pp. 970–973
[2] pp. 251–257
[3] pp. 276 - 278
[4] pp. 173 - 179
[5] pp. 301- 310

Class 3

Key questions covered in Lecture №2: Typhoid and paratyphoid fever (2 hrs)

1. The organism.
2. Issues of epidemiology.
3. Pathogenesis.
4. Clinical sings and complications.
5. Laboratory tests.
6. Treatment.

Class 4

Key questions covered in Practice class №2: Food poisoning. Non-typhoid Salmonella. Botulism (2 hrs)

1. Analysis of clinical symptoms of Food poisoning, Salmonella infection, Botulism.
2. Differential diagnostics.
3. Laboratory tests.
4. Treatment.
5. Prevention.

Recommended reading for the class:

[1] pp. 834–838; 920–922; 973–974
[2] pp. 157–160
[3] pp. 388

Class 5

Key questions covered in Lecture №3: Food poisoning. Non-typhoid Salmonella. Botulism. Shigellosis. E. coli infection (2 hrs)

1. Organisms list (Staphylococcus aureus, Bacillus cereus and other Bacillus spp, Clostridium perfringens, C.difficile, C.botulinum, non-typhoidal Salmonella) of food poisoning.
2. Issues of epidemiology.
3. Pathogenesis.
4. Clinical presentation.
5. Laboratory diagnostics and treatment.

Class 6

Key questions covered in Practice class №3: Shigellosis. E. coli infection (2 hrs)

1. Analysis of clinical symptoms of infections.
2. Differential diagnostics.
3. Laboratory tests.
4. Treatment.
5. Prevention.

Recommended reading for the class:
[1] pp. 975–978
[2] pp. 345–350
[3] pp. 282

Class 7

Key questions covered in Practice class №4: Practice classes№ 5: Helminthes (4 hrs)

1. Etiology. Issues of epidemiology.
2. Clinical presentations.
3. Differential diagnostics.
4. Laboratory tests.
5. Treatment. Prevention.

Recommended reading for the class:
[1] pp. 1233–1252
[2] pp. 255–379
[3] pp. 37; 69; 127; 313; 322

Class 8

Key questions covered in Practice classes№ 6: Module №1 (2 hrs)

1. The course of infectious diseases depending on age.
2. Definition of terms « infection», «infectious process», «infectious diseases».
3. The clinical course and cycles of infectious disease.
4. The role of immunity and allergy reactions of infectious diseases processes.
5. The role of epidemiological data for the infectious diseases diagnosis
6. Emergency conditions of infectious diseases.
7. Emergency conditions of infectious diseases, pathogenesis, clinical features, management
8. Management of infectious diseases
9. Antimicrobial chemotherapy at infectious diseases.
10. Antiviral therapy of infectious diseases.
11.Serums and immunoglobulins for the treatment of infectious diseases.
12. Outpatient care of the patients with infectious diseases.
13. Regular medical check-up of the patients with infectious diseases.
14. Epidemiology and prevention of nosocomial infections.
15. Methods of prevention and control of infectious diseases.
16. Laboratory tests for infectious diseases diagnosis.
17. Allergic tests for the infectious diseases diagnosis.
18. Serological methods in the diagnosis of infectious diseases
19. Instrumental methods for the infectious diseases diagnosis.
20. Admission (to hospital) of the patients with infectious diseases.
21. Admission (to hospital) of the patients with acute infectious diarrhea.
22. Admission (to hospital) of the patients with airborne infections.
23.The classification of infectious diseases.
24. The classification and characteristics of helminthes.
25. The classification and characteristics of hemorrhagic fever.
26. Diagnostic valve of fever at infectious diseases .
27. Diagnostic valve of raches at infectious diseases.
28. Typhoid fever. Etiology. Epidemiology. Pathogenesis of disease. Clinical manifestations. Complications. Laboratory and differential diagnosis. Management. Prevention .
29. Paratyphoid A. Etiology. Epidemiology. Pathogenesis of disease. Clinical manifestations. Complications. Laboratory and differential diagnosis. Management. Prevention .

30. Paratyphoid B. Etiology. Epidemiology. Pathogenesis of disease. Clinical manifestations. Complications. Laboratory and differential diagnosis. Management. Prevention .
31.Shigellosis. Etiology. Epidemiology. Pathogenesis of disease. Clinical manifestations. Complications. Laboratory and differential diagnosis. Management. Prevention .
32.Amoebiasis. Etiology. Epidemiology. Pathogenesis of disease. Clinical manifestations. Complications. Laboratory and differential diagnosis. Management. Prevention .
33.Food poisoning. Etiology. Epidemiology. Clinical manifestations. Laboratory diagnosis. Management.
34.Botulism. Etiology. Epidemiology. Pathogenesis of disease. Clinical manifestations. Laboratory and differential diagnosis. Management. Prevention .
35.Salmonella infections. Etiology. Epidemiology. Pathogenesis of disease. Clinical manifestations. Laboratory and differential diagnosis. Management. Prevention .
36.E.coli. Etiology. Epidemiology. Pathogenesis of disease. The classification clinical forms. Clinical manifestations. Laboratory and differential diagnosis. Management.
Recommended reading for the class:

UNIT №2 «BLOOD-BORNE INFECTIONS»
Content of unit 2
Class 1.
Key questions covered in Lecture №1: Viral hepatitis A and E (2 hrs).
1. The organisms of viral hepatitis A and E.
2. Issues of epidemiology.
3. Pathogenesis.
4. Clinical presentations.
5. Laboratory tests and treatment.

Class 2.
Key questions covered in Practice class №1:Viral hepatitis A and E (2 hrs).
1. Analysis of clinical symptoms of viral hepatitis A and E.
2. Differential diagnostics.
3. Laboratory tests.
4. Treatment.
5. Prevention.

Recommended reading for the class:
[1] pp. 1733–1751; 1771
[2] pp. 253–255; 312–404
[3] pp. 155–163; 472– 479; 812–815
Class 3.
Key questions covered in Lecture №2: Viral hepatitis B, D and C (2 hrs).
1. The organisms of viral hepatitis B, D and C.
2. Issues of epidemiology.
3. Pathogenesis.
4. Clinical presentations.
5. Laboratory tests and treatment.

Class 4.
Key questions covered in Practice classes№2: Viral hepatitis B, D (2 hrs).
1. Analysis of clinical symptoms of viral hepatitis B, D and C.
2. Differential diagnostics.
3. Laboratory tests.
4. Treatment.
5. Prevention.

Recommended reading for the class:
[1] pp. 1733–1751; 1771
[2] pp. 253–255; 312–404
[3] pp. 155–163; 472– 479; 812–815
Class 5
Key questions covered in Practice classes№3: Viral hepatitis C (2 hrs).
1. Analysis of clinical symptoms of viral hepatitis B, D and C.
2. Differential diagnostics.
3. Laboratory tests.
4. Treatment.
5. Prevention.

Recommended reading for the class:
[1] pp. 1733–1751; 1771
[2] pp. 253–255; 312–404

[3] pp. 155–163; 472– 479; 812–815

Key questions covered in Lecture №3: HIV-infection (4 hrs).

1. The organisms of HIV-infection, life cycle.
2. Issues of epidemiology.
3. Pathogenesis.
4. WHO Clinical staging of HIV.
5. Laboratory tests.
6. Treatment.

Class 6

Key questions covered in Practice class №4: HIV-infection (4 hrs).

1. Analysis of Clinical staging of HIV.
2. Characteristic of opportunistic infections.
3. Issues of psychosocial counseling.
4. Activities in identifying an HIV-infected person.
5. Issues of adherence to ART.
6. Prevention.

Recommended reading for the class:
[1] стр. 773; 918–920; 986–989
[2] стр. 148–150; 160; 236–237; 252–256; 262; 346

Key questions covered in Practice class №5: Module №2 (2 hrs).

1. Hepatitis A. Etiology. Epidemiology. Pathogenesis of disease. Clinical manifestations. Laboratory and differential diagnosis. Management. Prevention .
2.Hepatitis B. Etiology. Epidemiology. Pathogenesis of disease. Clinical manifestations. Laboratory and differential diagnosis. Management. Prevention .
3.Hepatitis C. Etiology. Epidemiology. Pathogenesis of disease. Clinical manifestations. Laboratory and differential diagnosis. Management. Prevention .
4.Hepatitis D. Etiology. Epidemiology. Pathogenesis of disease. Clinical manifestations. Laboratory and differential diagnosis. Management. Prevention .
5.Hepatitis E. Etiology. Epidemiology. Pathogenesis of disease. Clinical manifestations. Laboratory and differential diagnosis. Management. Prevention .
6. HIV-infection. Etiology. Epidemiology. Pathogenesis of disease. Clinical manifestations. Complications. Laboratory and differential diagnosis. Management. Prevention
7. HIV-infection. Relevance, distribution in the world. The strategy of the UNAIDS. Etiology, life cycle of HIV. Epidemiology. Pathogenesis. Clinical classification of HIV infection according to WHO recommendations by stages. Characteristics of opportunistic infections (viral, bacterial, parasitosis, malignant neoplasms). Diagnosis, treatment (characteristics of antiretroviral drugs: class NIOT, NNIOT, IP, I, IF)

Recommended reading for the class:

UNIT №3 «Respiratory Tract Infections»

Content of Unit № 3

Class 1

Key questions covered in Lecture №1: Flu and other acute respiratory infections (2 hrs)

1. Etiology of flu, parainfluenza, adenoviral infection, RS-infection, rinoviral infection, enteroviral infection.
2. Issues of epidemiology.
3. Pathophisiology.
4. Laboratory tests and treatment.

Class 2

Key questions covered in Practice class №1: Flu and other acute respiratory infections (4 hrs)

1. Clinical features of respiratory viral infections.
2. The incubation period, clinical stages, complications.
3. Differential diagnostics.
4. Laboratory tests and treatment.
5. Prophylaxis.

Recommended reading for the class:
[1] pp. 1120–1130
[2] pp. 3–12
[3] pp. 130; 185; 347
[4] pp. 105 -108

Class 3

Key questions covered in Lecture №2: Meningococcal infection (2 hrs)

1. Etiology. Bacteria's characteristics.
2. Epidemiology and pathogenesis.
3. Laboratory diagnostics and treatment.

Class 4

Key questions covered in Practice class №2: COVID-19 (2 hrs)

1. Clinical features of COVID-19.
2. The incubation period, clinical stages, complications.
3. Differential diagnostics.
4. Laboratory tests and treatment.
5. Prophylaxis.

Recommended reading for the class:
[1] pp. 1120–1130
[2] pp. 3–12
[3] pp. 130; 185; 347
[4] pp. 105 -108

Class 5

Practice class №3: Meningococcal infection (4 hrs)

1. Clinical presentations.
2. The incubation period, clinical stages, complications.
3. Differential diagnostics.
4. Laboratory diagnostics and treatment.
5. Prophylaxis.

Recommended reading for the class:
[1] pp. 927–931
[2] pp. 164–171; 239–243
[3] pp. 233

Class 6

Key questions covered in Lecture №3: Herpetic infection (2 hrs)

1. Etiology.
2. Epidemiology
3. Pathogenesis.
4. Laboratory diagnostics
5. Treatment.

Class 7

Key questions covered in Practice class №4: Herpetic infection, Monkeypox, Smallpox (2 hrs)

1. Clinical presentations of herpetic infection, Monkeypox, Smallpox.
2. Differential diagnostics.
3. Laboratory diagnostics and treatment.
4. Prophylaxis.

Recommended reading for the class:
[1] pp. 1100–1102
[2] pp. 239–405
[3] pp. 331; 441

Key questions covered in Practice class №5: Module №3 (2 hrs).

1.Influenza. Etiology. Epidemiology. Pathogenesis of disease. Clinical manifestations. Complications. Laboratory and differential diagnosis. Management. Prevention .
2.Parainfluenza. Etiology. Epidemiology. Pathogenesis of disease. Clinical manifestations. Laboratory and differential diagnosis. Management. Prevention .
3.Adenovirus infection. Etiology. Epidemiology. Pathogenesis of disease. Clinical manifestations. Laboratory and differential diagnosis. Management. Prevention .
4.Meningococcosis Etiology. Epidemiology. Pathogenesis of disease. The classification clinical forms. Clinical manifestations. Complications. Laboratory and differential diagnosis. Management. Prevention .
5.COVID-19. Etiology. Epidemiology. Pathogenesis of disease. Clinical manifestations. Complications. Laboratory and differential diagnosis. Management. Prevention .
6. Smallpox. Etiology. Epidemiology. Pathogenesis of disease. Clinical manifestations.
Complications. Laboratory and differential diagnosis. Management. Prevention .
7.Herpes infection, Monkeypox, Smallpox. Etiology. Epidemiology. Pathogenesis of disease. Clinical manifestations. Complications. Laboratory and differential diagnosis. Management. Prevention

Recommended reading for the class:

UNIT №4 «Zoonotic infections»
Content of Unit № 4
Class 1
Key questions covered in Lecture №1: Brucellosis, Yersinia infection (2 hrs)

I. Brucellosis
1. The microorganism.
2. Issues of epidemiology.
3. Pathogenesis.
4. Laboratory tests and treatment.
5. Prevention.

II. Yersinia infection.
1. The microorganism.
2. Issues of epidemiology.
3. Pathogenesis.
4. Labortory tests and treatment.
5. Prevention.

III. Anthrax
1. The microorganism.
2. Issues of epidemiology.
3. Pathogenesis.
4. Labortory tests and treatment.
5. Prevention.

Class 2
Key questions covered in Practice class №1: Brucellosis. Yersinia infection (4 hrs)
1. Brucellosis.
2. Clinical presentations of brucellosis.
3. Clinical presentations of Yersinia infection.
4. Differential diagnostics.
5. Laboratory diagnostics and treatment.
6. Prophylaxis.

Recommended reading for the class:
[1] pp. 986–989
[2] pp. 148–150; 236–237; 252–256
[3] pp. 59

Class 3
Key questions covered in Practice class №2: Anthrax (2 hrs)
Clinical presentations of Anthrax.
2. Differential diagnostics.
3. Laboratory diagnostics and treatment.
4. Prophylaxis.

Recommended reading for the class:
[1] pp. 914–915
[2] pp. 253–256
[3] pp. 40

Class 4
Key questions covered in Lecture №2: Rabies and Tetanus (2 hrs)
1. The microorganism.
2. Issues of epidemiology.
3. Pathogenesis.
4. Labortory tests and treatment.
5. Prevention.

Class 5.
Key questions covered in Practice class №3: Rabies and Tetanus (2 hrs)
1. Clinical presentations of Rabies and Tetanus.
2. Differential diagnostics.
3. Laboratory diagnostics and treatment.
4. Prophylaxis.

Recommended reading for the class:
[1] pp. 1149–1150
[2] pp. 205; 321–322; 346

[3] pp. 268

Class 6

Key questions covered in Practice class №4: Module №4 (2 hrs).

1. Yersinia infections Etiology. Epidemiology. Pathogenesis of disease. Clinical manifestations. Laboratory and differential diagnosis. Management.
2. Brucellosis. Etiology. Epidemiology. Pathogenesis of disease. The classification clinical forms. Clinical manifestations. Laboratory and differential diagnosis. Management. Prevention .
2. Tetanus. Etiology. Epidemiology. Pathogenesis of disease. Clinical manifestations. Laboratory and differential diagnosis. Management. Prevention.
3. Anthrax. Etiology. Epidemiology. Pathogenesis of disease. The classification clinical forms. Clinical manifestations. Complications. Laboratory and differential diagnosis. Management. Prevention .
4. Rabies. Etiology. Epidemiology. Pathogenesis of disease. Clinical manifestations. Laboratory and differential diagnosis. Management. Prevention .

Recommended reading for the class:

UNIT №5 «Vector-borne infections»

Content of unit № 5

Class 1

Key questions covered in Lecture №1: Rickettsioses (2 hrs)

1. General etiological characteristics of Rickettsioses.
2. Epidemiological and clinical signs of Rickettsioses.
3. Laboratory diagnostics and treatment.
4. Clinical presentations of Epidemic typhus and Brill's disease.
5. Differential diagnostics.
6. Laboratory diagnostics and treatment.
7. Prophylaxis.

Class 2

Key questions covered in Practice class № 1: Rickettsioses (2 hrs)

1. Clinical presentations of Epidemic typhus and Brill's disease.
2. Differential diagnostics.
3. Laboratory diagnostics and treatment.
4. Prophylaxis.

Recommended reading for the class:

[1] pp. 1065–1072

[2] pp. 252–256

[3] pp. 96; 114; 274

[4] pp. 98 - 103

Class 3

Key questions covered in Lecture №2. Plague (2 hrs)

1. Etiology.
2. Epidemiology and pathogenesis.
3. Laboratory diagnostics and treatment.
4. Clinical presentations of Plague.
5. Differential diagnostics.
6. Laboratory diagnostics and treatment.
7. Prophylaxis.

Class 4

Key questions covered in Practice class №2: Indian tick typhus (2 hrs)

1. Etiology.
2. Epidemiology and pathogenesis.
3. Laboratory diagnostics and treatment.
4. Clinical presentations of Indian tick typhus
5. Differential diagnostics.
6. Laboratory diagnostics and treatment.
7. Prophylaxis.

Class 5

Key questions covered in Practice class № 3: Plague (2hrs)

1. Etiology.
2. Epidemiology and pathogenesis.
3. Laboratory diagnostics and treatment.
4. Clinical presentations of Plague.

5. Differential diagnostics.
6. Laboratory diagnostics and treatment.
7. Prophylaxis.

Recommended reading for the class:
[1] pp. 990–1001
[2] pp. 252–255; 345–346; 399
[3] pp. 339

Class 6

Key questions covered in Practice class №4: Tick-born encephalitis (2 hrs)

1. Clinical characteristics of tick-borne viral encephalitis, Japanese encephalitis.
2. Differential diagnosis.
3. Diagnosis, treatment.
4. Prevention

Recommended reading for the class:
[1] pp. 1075–1077
[2] pp. 258–260
[3] pp. 274– 278

Class 7

Key questions covered in Practice class №5: Borrelia infection (2 hrs)

1. Clinical presentations of Borreliosis.
2. Differential diagnostics.
3. Laboratory diagnostics and treatment.
4. Prophylaxis.

Recommended reading for the class:
[1] pp. 1065–1072
[2] pp. 252–256
[3] pp. 96; 114; 274

Key questions covered in Practice class №6: Module №5 (2 hrs).

1. Ricketsiosis. Epidemic typhus. Brill, s disease. Etiology. Epidemiology. Pathogenesis of disease. Clinical manifestations. Complications. Laboratory and differential diagnosis. Management. Prevention
2. Q-fever. Etiology. Epidemiology. Pathogenesis of disease. Clinical manifestations. Complications. Laboratory and differential diagnosis. Management. Prevention.
3. Relapsing fever Etiology. Epidemiology. Pathogenesis of disease. Clinical manifestations. Laboratory and differential diagnosis. Management. Prevention .
4. Plague Etiology. Epidemiology. The classification clinical forms. Pathogenesis of disease. Clinical manifestations. Complications. Laboratory and differential diagnosis. Management. Prevention.
5. Tick-born encephalitis Etiology. Epidemiology. Pathogenesis of disease. The classification clinical forms. Clinical manifestations. Laboratory and differential diagnosis. Management. Prevention.
6. Borreliosis. Etiology. Epidemiology. Pathogenesis of disease. Clinical manifestations. Complications. Laboratory and differential diagnosis. Management. Prevention.

Recommended reading for the class:

Main literature:

A. Textbooks available in the library collection:

1. J.E. Bennett, R.Dolin, M.J. Blaser. Mandell Douglas and Bennett's Infectious Disease Essentials – 1st Edition.2017.
2. Mandell Douglas and Bennett's Infectious Disease Essentials 2017: https://oshimu.com/wpcontent/uploads/2021/07/Mandell-Douglas-and-Bennett%E2%80%99s-Infectious-Disease-Essentials-PDFDrive-.pdf 3. A.Spec, G.V. Escota, C. Chrisler, B.Davies.Comprehensive Review of Infectious Diseases – 1st Edition. 2019
4. Essentials of Clinical Infectious Diseases, 2013. Essentials of Clinical Infectious Diseases 2013 file:///C:/Users/User/Downloads/12bc5be5c42bea636becef7f6a430a3f.pdf 5. Nelson M. Gantz. Manual of clinical problems in infectious diseases, 1994, 504p.

B. Manuals prepared by the teachers of the department:

Infectious Disease /Barbara A. banister, Norman T. Begg, Stephen H.Gillespie – 2nd ed, 2000, 506p.
Medical microbiology by P.R. Murray, K.S. Rosenthal, G.S. Kobayashi and M.A. Pfaller, 3rd Edition.

C. Other textbooks, monographs (release date - 10 - 5 years):

1. Typhoid Fever- Methodological recommendations for medical students/ Kutmanova A.Z., Buranchieva A.A., Omurkulova B.I., Kamchybekova A.A., 2018, 20p.

D. Articles from special journals (date of publication), link

1.American Journal of Gastroenterology (https://www.aje.com/)
2.Infectious Diseases Journal (https://academic.oup.com)

E. Clinical guidelines, WHO recommendations:

1. Typhoid and parathyphoid a,b fevers: https://www.gov.uk/government/publications/typhoid-and-paratyphoid-public-health-operational-guidelines/public-health-operational-guidelines-for-typhoid-and-paratyphoid-enteric-fever.
2. Non-typhoid salmonella:https://www.who.int/news-room/fact-sheets/detail/salmonella-(non-typhoidal).
3. Shigellosis: https://pmc.ncbi.nlm.nih.gov/articles/PMC6021764/pdf/ypch-38-1409454.pdf
4. Botulism: https://www.cdc.gov/mmwr/volumes/70/rr/pdfs/rr7002a1-H.pdf.
5. Viral hepatitis: https://www.rbc.gov.rw/IMG/pdf/national_guidelines_for_the_prevention_and_management_of_viral_hepatitis_b_and_c_-_final_signed.pdf.
https://www.nice.org.uk/guidance/cg165/resources/hepatitis-b-chronic-diagnosis-and-management-pdf-35109693447109
6.HIV infection: https://bhiva.org/wp-content/uploads/2024/10/HIV-testing-guidelines-2020.pdf
7. Acute respiratory infectious diseases: https://www.nice.org.uk/guidance/ng237/resources/suspected-acute-respiratory-infection-in-over-16s-assessment-at-first-presentation-and-initial-management-pdf-66143901172165
8. Meningococcal infection: https://www.bmj.com/content/bmj/387/bmj.q2452.full.pdf
1.Anthrax:https://iris.who.int/bitstream/handle/10665/59516/WHO_EMC_ZDI_98.6.pdf?sequence=1file:///C:/Users/user/AppData/Local/Microsoft/Windows/INetCache/IE/7W79AEJS/Anthrax_SOP[1].pdf
2. Rabies: https://share.google/3psUYCoTKSkPwaRct,
https://cdn.who.int/media/docs/default-source/searo/india/health-topic-pdf/pep-prophylaxis-guideline-15-12-2014.pdf?sfvrsn=8619bec3_2
3. Brucellosis: https://doh.wa.gov/sites/default/files/2025-08/420-048-Guideline-Brucellosis.pdf, https://iris.who.int/bitstream/handle/10665/43597/WHO_CDS_EPR_2006.7_eng.pdf?sequence=1
4.Enchephalities: https://iris.who.int/bitstream/handle/10665/380453/9789240106475-eng.pdf?sequence=1
5.Yersiniosis: https://iris.who.int/bitstream/handle/10665/380568/B09229-eng.pdf?sequence=1&isAllowed=yhttps://www.woah.org/app/uploads/2021/05/yersinia-pseudotuberculosis-infection-with.pdf 6. Borreliosis: Lyme disease NICE guideline, Published: 11 April 2018, Last updated: 17 October 2018, https://www.nice.org.uk/guidance/ng95/resources/lyme-disease-pdf-1837756839877 https://pmc.ncbi.nlm.nih.gov/articles/PMC7174852/
7.Riccetsiosis:https://journals.lww.com/jvbd/fulltext/2024/61010/human_rickettsial_infections_in_india___a_review.2.aspx

Additional literature:

1. Harrison's, Dennis L.Kasper, Anthony S. Fauci 2nded. - Infectious Diseases 2014, 1430 pp. https://t.me/+VkCtka825jT15329
2. Typhoid Fever- Methodological recommendations for medical students/Kutmanova A.Z., Buranchieva A.A., Omurkulova B.I., Kamchybekova A.A., 2018, 20p.
3. Nelson M. Gantz. Manual of clinical problems in infectious diseases, 1994, 504p.
4. Carlos M. Isada. Infectious Disease Handbook, 2003, 1350p.
5. Jonathan Cohen, Steven M. Opal, William G. Powderly- Infectious diseases., 2017.,https://t.me/+VkCtka825jT15329
6. Elaine C. Jong and Dennis L. Stevens Netter's - Infectious diseases., 2017.,https://t.me/+VkCtka825jT15329

Ресурсы информационно-телекоммуникативной сети «Интернет»

1.https://www.youtube.com/watch?v=xRTMXvZ75dY
2.https://youtu.be/vVD5QtVmC8s
3.https://youtu.be/dBEDs3XaqFQ
4.https://www.youtube.com/watch?v=MjarSuoADKY
5.https://www.youtube.com/watch?v=uIut0oVWCEg
6.https://www.youtube.com/watch?v=fV-jhNQs_WE
7.https://www.youtube.com/watch?v=VaLDGWumrVw

Methodological instructions for the implementation of independent work on the discipline

For each topic, students, working independently, should be able:
- the signs and symptoms of infectious diseases;
- clinical and epidemiological indications for admitted to the hospital;
- basic laboratory tests used in the diagnosis of infectious diseases;
- complications and outcomes of infectious diseases;
- treatment and prevention of infectious diseases;
- diagnosing of emergency conditions, diagnosis and treatment;