

**MINISTRY OF SCIENCE, HIGHER EDUCATION AND INNOVATION OF THE KYRGYZ  
REPUBLIC**

Interstate Educational Organization of Higher Education  
Kyrgyz Russian Slavic University named after the first President of the Russian Federation B.N.Yeltsin

ENDORSED by  
Dean of the Faculty



« 20 » November 2025

## Infectious diseases including tropical infections Course outline (Module)

Assigned to	<b>Department of Infectious Diseases</b>	
Academic curriculum	560001_24_2 LD ил.plx Specialty 560001 - KG General medicine (for foreign students)	
Mode of study	<b>intramural</b>	
Total credit value	<b>10 credit points</b>	
Course hours including:	360	Scope of testing semester: exam 8 credits 7
In-class learning	192	
Individual work	131,7	
Exams	35,5	

### Course hours scheduling (per semester)


Semester Academic Year	7 (4.1)		8 (4.2)		Total	
	18		18			
Type of training	AC	CO	CO	CO	AC	CO
Lectures	32	32	32	32	64	64
Practical sessions	64	64	64	64	128	128
Contact work during theoretical training	0,3	0,3			0,3	0,3
Contact work during the examination session			0,5	0,5	0,5	0,5
Including interactive sessions.	4	4	4	4	8	8
Total in-class sessions.	96	96	96	96	192	192
Face-to-face learning	96,3	96,3	96,5	96,5	192,8	192,8
Student's individual work	83,7	83,7	48	48	131,7	131,7
Tests			35,5	35,5	35,5	35,5
<b>Total</b>	<b>180</b>	<b>180</b>	<b>180</b>	<b>180</b>	<b>360</b>	<b>360</b>

The course outline was compiled by:

PhD, head of department, Kuvatova D. O. 

Reviewers:

PhD, head of department Dzhumagulova A.Sh.; 

Ph. D., head of department Baltabaev M. K. 

The course outline

**Infectious diseases including tropical infections**

Developed in full compliance with:

state educational standard of higher professional education for students trained for the specialty 560001 GENERAL MEDICINE (the Ministry of Education and Science of the Kyrgyz Republic Order of 30/07/2021 No1357/1)

in accordance with the Academic curriculum:

Specialty 560001 - KG General medicine  
(for foreign students)

confirmed by KRSU Board of Academics in 30/06/2025 record No 13

The course outline endorsed by **Infectious diseases** department meeting

Record of 27/08/2025 No 1

Valid for 2024-2029 academic year

head of department: PhD, associate professor Kuvatova D.O. 

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**The course outline endorsed for the following academic year**

Chairman of the educational and methodological board

\_\_\_\_\_

The course outline has been revised, considered and endorsed for implementation  
in the \_\_\_\_\_ - \_\_\_\_\_ academic year at a staff meeting of **Infectious Diseases** Department

Record of \_\_\_\_\_ No \_\_\_\_\_

head of department: \_\_\_\_\_

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Chairman of the educational and methodological board

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Record of \_\_\_\_\_ No \_\_\_\_\_

head of department: \_\_\_\_\_

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Record of \_\_\_\_\_ No \_\_\_\_\_

head of department: \_\_\_\_\_

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in the \_\_\_\_\_ - \_\_\_\_\_ academic year at a staff meeting of **Infectious Diseases** Department

Record of \_\_\_\_\_ No \_\_\_\_\_

head of department: \_\_\_\_\_

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**The course outline endorsed for the following academic year**

Chairman of the educational and methodological board

\_\_\_\_\_

The course outline has been revised, considered and endorsed for implementation  
in the \_\_\_\_\_ - \_\_\_\_\_ academic year at a staff meeting of **Infectious Diseases** Department

Record of \_\_\_\_\_ No \_\_\_\_\_

head of department: \_\_\_\_\_

### 1. COURSE OUTLINE OBJECTIVES

1.1	Formation of knowledge, experiences and practical skills required for early diagnosis of infectious diseases including tropical infections, carrying out of a complex of therapeutic and preventive measures, diagnosis of urgent conditions at the pre- and hospital stages of medical care.
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### 2. THE PLACE OF THE COURSE IN THE EDUCATIONAL PROGRAMM

Educational program units:		B1.O.03
<b>2.1</b>	<b>Students' preliminary training requirements:</b>	
2.1.1	Pathophysiology, clinical pathophysiology	
2.1.2	Epidemiology	
2.1.3	Immunology	
2.1.4	Pathological anatomy	
2.1.5	Biology, Microbiology, Virology	
2.1.6	Propaedeutic therapy	
2.1.7	Pharmacology	
<b>2.2</b>	<b>Course units and practical sessions imposing prior Proficiency:</b>	
2.2.1	Family Medicine	
2.2.2	Final State Certification	
2.2.3	Pediatrics	
2.2.4	Outpatient Therapy	
2.2.5	Outpatient Surgery	
2.2.6	Anesthesiology, Resuscitation, Intensive Care	
2.2.7	Hospital Therapy	
2.2.8	Hospital Surgery	

### 3. STUDENT'S COMPETENCIES RESULTING FROM THE COURSE UNIT (MODULE)

<b>PC-5: Able and willing to conduct and interpret interviews, physical inspection, clinical examinations, and the results of modern laboratory and instrumental methods, and write medical records for outpatient and inpatient patients of adults and children</b>	
<b>Knowledge:</b>	
Level 1	methods of collecting and analyzing patient complaints, data from his anamnesis, indications and contraindications for additional laboratory and instrumental examination methods.
<b>Skills:</b>	
Level 1	to question, collect complaints and anamnesis of outpatient and inpatient adults and children, using methods and means of medical examination and diagnostic measures.
<b>Expertise:</b>	
Level 1	skills in prescribing the necessary laboratory and instrumental examination methods in outpatient and inpatient settings, as well as skills in drawing up medical histories and maintaining outpatient cards for adults and children.
<b>PC-8: Able and willing to apply modern information on population health indicators at the healthcare facility level</b>	
<b>Knowledge:</b>	
Level 1	Population health indicators, factors shaping human health and the impact of occupational, natural, climatic, and endemic factors on human health.
<b>Skills:</b>	
Level 1	to assess living conditions, a hygienic assessment of the conditions of stay of patients in healthcare facilities, and to conduct a medical and statistical analysis of health and morbidity indicators.
<b>Expertise:</b>	
Level 1	Modern methods of assessing public health and social-hygienic monitoring. Methods of public health education for primary disease prevention.
<b>PC-10: Capable and willing to carry out preventive measures to prevent infectious, parasitic and non-infectious diseases.</b>	
<b>Knowledge:</b>	
Level 1	The main principles of general and special prevention of infectious, parasitic and non-infectious diseases, sanitary and hygienic and anti-epidemic requirements for medical organizations and public facilities, as well as the methodology for assessing the epidemiological situation, risk factors and risk groups for morbidity.

<b>Skills:</b>	
Level 1	Assess the epidemiological situation in a specific area or among a certain population, plan and implement primary and secondary disease prevention programs, identify risk groups for disease, and develop targeted preventive measures.
<b>Expertise:</b>	
Level 1	Skills in epidemiological analysis and preventive planning, methods of sanitary and anti-epidemic measures in infectious disease foci, methods of early detection of signs of potential epidemic threats, as well as practical skills in the prevention of parasitic diseases (disinfection, disinsection, deratization), technologies for the prevention of non-communicable diseases (screenings, patient routing).
<b>PC-13: Capable and ready to carry out anti-epidemic measures, protect the population in areas of highly dangerous infections, in the event of deterioration of the radiation situation and natural disasters and other emergency situations</b>	
<b>Knowledge:</b>	
Level 1	Fundamentals of organizing anti-epidemic measures in outbreaks of highly dangerous infections (plague, cholera, anthrax, etc.), algorithms for localization and elimination of outbreaks. Principles of civil defense and medical protection of the population in natural, man-made, and biological emergencies.
<b>Skills:</b>	
Level 1	Assess the epidemiological, radiation, and sanitary-hygienic situation, and determine the level of threat to the population and medical personnel. Organize and implement primary anti-epidemic measures: isolation, quarantine, disinfection, deratization, evacuation, and sanitization of the population. Provide medical assistance to victims of emergencies in cooperation with the Ministry of Emergency Situations and other services.
<b>Expertise:</b>	
Level 1	Skills in the use of personal and collective protective equipment, infection control methods, sanitization, and disinfection. Methods for rapid sanitary and epidemiological investigation of highly dangerous infection outbreaks and conducting epidemiological surveillance in emergency situations. Algorithms for planning, coordinating, and implementing measures to protect the population and medical personnel during quarantine, evacuation, and emergency response.
<b>PC-14: Capable and ready to make a diagnosis based on the results of biochemical and clinical studies, taking into account disorders in organs, systems and the entire body</b>	
<b>Knowledge:</b>	
Level 1	Normal and abnormal clinical and biochemical parameters of blood, urine, and other biological fluids, and their diagnostic value. Pathophysiological mechanisms of laboratory parameter changes in diseases of organs and systems (liver, kidneys, heart, endocrine system, etc.). Fundamentals of clinical laboratory diagnostics: stages of diagnosis, differential diagnosis, and clinical reasoning algorithms.
<b>Skills:</b>	
Level 1	Interpret the results of clinical and biochemical tests, taking into account the clinical picture and the course of the disease. Establish a preliminary and final diagnosis based on a combination of laboratory data, medical history, and physical examination results. Conduct differential diagnostics, determine the need for additional testing, and formulate a final diagnosis.
<b>Expertise:</b>	
Level 1	Skills in analyzing and summarizing laboratory data in clinical practice using modern diagnostic algorithms. Methods for comprehensively assessing the functional state of organs and systems based on laboratory test results. Clinical decision-making techniques for choosing diagnostic tactics and substantiating a diagnosis based on evidence-based medicine.
<b>PC-16: Able and willing to use a diagnostic algorithm (primary, secondary, and complication diagnoses) taking into account the ICD, and perform basic diagnostic procedures to identify urgent and life-threatening conditions</b>	
<b>Knowledge:</b>	
Level 1	Principles of clinical diagnostics: stages of diagnosis, diagnosis structure (primary disease, comorbidities, complications), and rules for formulating a diagnosis. The International Classification of Diseases (ICD), its structure, and rules for coding diseases and conditions. Clinical signs and pathogenetic mechanisms of the development of emergencies and life-threatening conditions (shock, myocardial infarction, pulmonary embolism, stroke, acute respiratory failure, etc.).
<b>Skills:</b>	
Level 1	Apply diagnostic algorithms based on complaints, medical history, physical examination data, laboratory and instrumental studies. Formulate a clinical diagnosis considering the requirements of the ICD and disease classification rules. Recognize emergency conditions, conduct a primary diagnosis, and assess the severity of the patient's condition.
<b>Expertise:</b>	
Level 1	Skills in coding diagnoses according to the ICD, considering the underlying disease, comorbidities, and complications. Diagnostic search algorithms for acute and life-threatening conditions and methods for their early detection. Clinical decision-making and patient triage methods in emergency care settings.

<b>PC-17: Capable and ready to perform basic treatment measures for the most common diseases and conditions in adults and children in outpatient and inpatient settings</b>	
<b>Knowledge:</b>	
Level 1	Principles of diagnosis and treatment of the most common diseases in adults and children. Fundamentals of drug therapy: pharmacodynamics and pharmacokinetics of the main drug groups, rules for their prescription, dosage, and possible side effects. Algorithms for providing medical care in outpatient and inpatient settings, standards and clinical guidelines for primary, specialized, and emergency care.
<b>Skills:</b>	
Level 1	Assess the patient's condition, formulate a diagnosis, and determine treatment strategies in accordance with established standards. Prescribe and adjust medication therapy, perform therapeutic procedures (injections, infusion therapy, bandaging, ECG, etc.). Provide first aid and emergency medical care for acute illnesses and conditions, including life-threatening ones.
<b>Expertise:</b>	
Level 1	Skills in performing basic treatment procedures in outpatient and inpatient settings (infusion therapy, oxygen therapy, local treatment, symptomatic therapy). Individualized treatment methods based on the patient's age, disease stage, comorbidities, and risk factors. Skills in monitoring the effectiveness and safety of therapy, assessing the patient's progress, and preventing complications.
<b>PC-19: Capable and ready to provide first aid in emergency and life-threatening conditions, and refer patients for hospitalization on a planned and emergency basis</b>	
<b>Knowledge:</b>	
Level 1	Diagnostic criteria and clinical signs of emergency and life-threatening conditions (acute respiratory failure, anaphylactic shock, myocardial infarction, stroke, massive bleeding, etc.). Principles of providing first aid and emergency medical care in accordance with current standards and clinical guidelines. Patient routing procedures, indications for planned and emergency hospitalization, and rules for interaction with emergency medical services and hospitals.
<b>Skills:</b>	
Level 1	Quickly assess the patient's condition and prioritize medical interventions. Provide first aid in emergency situations: administer CPR, manage acute pain, stop external bleeding, provide anti-shock measures, and ensure airway patency. Complete medical documentation and refer to the patient for planned or emergency hospitalization, justifying the need.
<b>Expertise:</b>	
Level 1	Skills in applying first aid and emergency treatment algorithms under time and resource constraints. Clinical decision-making methods in emergency situations and rules for organizing safe patient transportation. Skills in interacting with emergency medical teams, hospitalization services, and inpatient facilities to ensure timely medical care for the patient.

### Final student's competences

<b>3.1</b>	<b>Knowledge:</b>
3.1.1	The structure of the infectious service, organization and work principles of infectious diseases hospitals, departments, wards;
3.1.2	The main issues of the pathogenesis of infectious diseases;
3.1.3	The main clinical manifestations (symptoms, syndromes) of studied infectious diseases;
3.1.4	The main methods of laboratory and instrumental diagnostics used in infectiology (indications, theoretical basis of the method, interpretation of results);
3.1.5	Rules for the collection of pathological materials from an infectious patient;
3.1.6	The main principles of treatment of infectious diseases;
3.1.7	Indications for hospitalization of an infectious patient;
3.1.8	Specific and nonspecific prevention of studied infectious diseases.
<b>3.2</b>	<b>Skills:</b>
3.2.1	Take diseases and life history (including epidemiological history) of an infectious patient;
3.2.2	Create an algorithm for diagnosis, laboratory and instrumental examination plan;
3.2.3	Interpret the results of laboratory and instrumental examination of the patient;
3.2.4	Highlight leading clinical and laboratory syndromes;
3.2.5	To make a differential diagnosis between various diseases with similar clinical symptoms;
3.2.6	Assess the severity of an infectious disease;
3.2.7	Predict the course and outcome of an infectious disease;
3.2.8	To diagnose emergency conditions in infectious patients, as well as to determine further medical care in life-threatening
3.2.9	Formulate a diagnosis in accordance with the current ICD.

<b>3.3</b>	<b>Expertise:</b>
3.3.1	Methods of examination of the infectious patient (examination, palpation, percussion, auscultation);
3.3.2	Skills of differential diagnosis of symptoms and syndromes characteristic of infectious diseases;
3.3.3	Helping skills of medical and preventive measures at the pre- and hospital stages of caring;
3.3.4	Skills in providing urgent (emergency) and first aid in case of infectious pathology;

#### 4. COURSE (MODULE) STRUCTURE AND CONTENT

Class code	Subject name /type of class/	Semester / Academic year	Hours	Competencies	Literature	Interactive session	practice	Notes
<b>Section 1. Gastrointestinal infections</b>								
1.1	Typhoid fever. / Lec /	7	2	PC-5 PC -8 PC -10 PC - 13 PC -14 PC -16 PC -17 PC -19	L1.1 L2.1 L2.2 L3.3 E1			
1.2	Shigellosis. / Lec /	7	2	PC-5 PC -8 PC -10 PC - 13 PC -14 PC -16 PC -17 PC -19	L1.1 L2.1 L2.2 L3.3 E1			
1.3	Food-borne poisoning. / Lec /	7	2	PC-5 PC -8 PC -10 PC - 13 PC -14 PC -16 PC -17 PC -19	L1.1 L2.1 L2.2 L3.3 E1			
1.4	Cholera. / Lec /	7	2	PC-5 PC -8 PC -10 PC - 13 PC -14 PC -16 PC -17 PC -19	L1.1 L2.1 L2.2 L3.3 E1			
1.5	Rotavirus infection. / Lec /	7	2	PC-5 PC -8 PC -10 PC - 13 PC -14 PC -16 PC -17 PC -19	L1.1 L2.1 L2.2 L3.3 E1			
1.6	Introduction. Shigellosis. Amebiasis. / Prac /	7	4	PC-5 PC -8 PC -10 PC - 13 PC -14 PC -16 PC -17 PC -19	L1.1 L2.1 L2.2 L3.3 E1			
1.7	Cholera. Food -borne poisoning (toxicoinfection). Rotavirus infection. / Prac /	7	4	PC-5 PC -8 PC -10 PC - 13 PC -14 PC -16 PC -17 PC -19	L1.1 L2.1 L2.2 L3.3 E1			
1.8	Typhoid fever. Non typhoidal salmonellosis. Intestinal yersiniosis. / Prac /	7	4	PC-5 PC -8 PC -10 PC - 13 PC -14 PC -16 PC -17 PC -19	L1.1 L2.1 L2.2 L3.3 E1			
1.9	E. coli infection. Giardiasis. Module-1 / Prac /	7	4	PC-5 PC -8 PC -10 PC - 13 PC -14 PC -16 PC -17 PC -19	L1.1 L2.1 L2.2 L3.3 E1			
1.10	Listeria monocytogenes. Campylobacter. Aeromonas and Plesiomonas. Balantidiasis. / SIW /	7	12	PC-5 PC -8 PC -10 PC - 13 PC -14 PC -16 PC -17 PC -19	L1.1 L2.1 L2.2 E1			report with presentation
1.11	Dehydration with toxicosis in acute intestinal infections in children. / SIW /	7	12	PC-5 PC -8 PC -10 PC - 13 PC -14 PC -16 PC -17 PC -19	L1.1 L2.1 L2.2 L3.3 E1			report with presentation
1.12	Differential diagnosis of gastrointestinal syndrome of infectious and non-infectious origin. / SIW /	7	12	PC-5 PC -8 PC -10 PC - 13 PC -14 PC -16 PC -17 PC -19	L1.1 L2.1 L2.2 E1			report with presentation

**Section 2. Viral hepatitis**

2.1	General characteristics of viral hepatitis. / Lec /	7	4	PC-5 PC -8 PC -10 PC - 13 PC -14 PC -16 PC -17 PC -19	L1.1 L2.1 L2.2 L3.4 E1			
2.2	Principles of diagnosis and management of viral hepatitis in an acute stage. / Lec /	7	2	PC-5 PC -8 PC -10 PC - 13 PC -14 PC -16 PC -17 PC -19	L1.1 L2.1 L2.2 L3.4 E1			
2.3	Enteral viral hepatitis (HAV, HEV) / Prac /	7	4	PC-5 PC -8 PC -10 PC - 13 PC -14 PC -16 PC -17 PC -19	L1.1 L2.1 L2.2 L3.4 E1			
2.4	Parenteral acute viral hepatitis (HBV, HCV, HDV) / Prac /	7	4	PC-5 PC -8 PC -10 PC - 13 PC -14 PC -16 PC -17 PC -19	L1.1 L2.1 L2.2 L3.4 E1			
2.5	Chronic viral hepatitis. Module - 2. / Prac /	7	4	PC-5 PC -8 PC -10 PC - 13 PC -14 PC -16 PC -17 PC -19	L1.1 L2.1 L2.2 L3.4 E1			
2.6	Cirrhosis and liver cancer in the outcome of viral hepatitis. / SIW /	7	12	PC-5 PC -8 PC -10 PC - 13 PC -14 PC -16 PC -17 PC -19	L1.1 L2.1 L2.2 E1			report with presentation
2.7	Differential diagnosis of liver damage of infectious and non-infectious genesis. / SIW /	7	12	PC-5 PC -8 PC -10 PC - 13 PC -14 PC -16 PC -17 PC -19	L1.1 L2.1 L2.2 E1			report with presentation

**Section 3. Vector-borne infections**

3.1	Malaria / Lec /	7	2	PC-5 PC -8 PC -10 PC - 13 PC -14 PC -16 PC -17 PC -19	L1.1 L2.1 L2.2 E1			
3.2	North Asian tick-borne spotted fever (rickettsiosis). / Lec /	7	2	PC-5 PC -8 PC -10 PC - 13 PC -14 PC -16 PC -17 PC -19	L1.1 L2.1 L2.2 E1			
3.3	Cat-scratch disease. / Lec /	7	2	PC-5 PC -8 PC -10 PC - 13 PC -14 PC -16 PC -17 PC -19	L1.1 L2.1 L2.2 E1			
3.4	Malaria. Typhus fever (rickettsiosis). / Prac /	7	4	PC-5 PC -8 PC -10 PC - 13 PC -14 PC -16 PC -17 PC -19	L1.1 L2.1 L2.2 E1			
3.5	North Asian tick-borne rickettsiosis. Relapses fevers. / Prac /	7	4	PC-5 PC -8 PC -10 PC - 13 PC -14 PC -16 PC -17 PC -19	L1.1 L2.1 L2.2 E1			
3.6	Cat-scratch disease. Q-fever. Module-3 / Prac /	7	4	PC-5 PC -8 PC -10 PC - 13 PC -14 PC -16 PC -17 PC -19	L1.1 L2.1 L2.2 E1			
3.7	Differential diagnostics of vector-borne infections. / SIW /	7	11,7	PC-5 PC -8 PC -10 PC - 13 PC -14 PC -16 PC -17 PC -19	L1.1 L2.1 L2.2 E1			report with presentation

<b>Section 4. Highly contagious and conventional infection.</b>								
4.1	Plague. / Lec /	7	2	PC-5 PC -8 PC -10 PC - 13 PC -14 PC -16 PC -17 PC -19	L1.1 L2.1 L2.2 E1			
4.2	Anthrax. / Lec /	7	2	PC-5 PC -8 PC -10 PC - 13 PC -14 PC -16 PC -17 PC -19	L1.1 L2.1 L2.2 E1			
4.3	Plague. Anthrax. Tularemia. / Prac /	7	4	PC-5 PC -8 PC -10 PC - 13 PC -14 PC -16 PC -17 PC -19	L1.1 L2.1 L2.2 E1	4		Use of personal protective equipment
4.4	Hemorrhagic fever with renal syndrome. Smallpox. Module-4 / Prac /	7	4	PC-5 PC -8 PC -10 PC - 13 PC -14 PC -16 PC -17 PC -19	L1.1 L2.1 L2.2 E1			
4.5	Clinical, epidemiological and preventive aspects of bioterrorism. / SIW /	7	12	PC-5 PC -8 PC -10 PC - 13 PC -14 PC -16 PC -17 PC -19	L1.1 L2.1 L2.2 E1			report with presentation
<b>Section 5. Tropical diseases of viral origin</b>								
5.1	Dengue fever / Lec /	7	2	PC-5 PC -8 PC -10 PC - 13 PC -14 PC -16 PC -17 PC -19	L1.1 L2.1 L2.2 E1			
5.2	Yellow fever / Lec /	7	2	PC-5 PC -8 PC -10 PC - 13 PC -14 PC -16 PC -17 PC -19	L1.1 L2.1 L2.2 E1			
5.3	Ebola fever / Lec /	7	2	PC-5 PC -8 PC -10 PC - 13 PC -14 PC -16 PC -17 PC -19	L1.1 L2.1 L2.2 E1			
5.4	Dengue fever and dengue hemorrhagic syndrome. Yellow fever / Prac /	7	4	PC-5 PC -8 PC -10 PC - 13 PC -14 PC -16 PC -17 PC -19	L1.1 L2.1 L2.2 E1			
5.5	Ebola and Marburg fever. / Prac /	7	4	PC-5 PC -8 PC -10 PC - 13 PC -14 PC -16 PC -17 PC -19	L1.1 L2.1 L2.2 E1			
5.6	Chikungunya fever, West Nile fever. Module 5. / Prac /	7	4	PC-5 PC -8 PC -10 PC - 13 PC -14 PC -16 PC -17 PC -19	L1.1 L2.1 L2.2 E1			
5.7	Credit class / Prac /	7	4	PC-5 PC -8 PC -10 PC - 13 PC -14 PC -16 PC -17 PC -19	L1.1 L2.1 L2.2 E1			
5.8	/ Control /	7	0,3	PC-5 PC -8 PC -10 PC - 13 PC -14 PC -16 PC -17 PC -19	L1.1 L2.1 L2.2 E1			
<b>Section 6. Infection with neurological disorders</b>								
6.1	Meningococcal infection. / Lec /	8	2	PC-5 PC -8 PC -10 PC - 13 PC -14 PC -16 PC -17 PC -19	L1.1 L2.1 L2.2 E1			

6.2	Tick-borne encephalitis / Lec /	8	1	PC-5 PC -8 PC -10 PC - 13 PC -14 PC -16 PC -17 PC -19	L1.1 L2.1 L2.2 E1			
6.3	Botulism / Lec /	8	2	PC-5 PC -8 PC -10 PC - 13 PC -14 PC -16 PC -17 PC -19	L1.1 L2.1 L2.2 E1			
6.4	Tetanus / Lec /	8	2	PC-5 PC -8 PC -10 PC - 13 PC -14 PC -16 PC -17 PC -19	L1.1 L2.1 L2.2 E1			
6.5	Poliomyelitis / Lec /	8	1	PC-5 PC -8 PC -10 PC - 13 PC -14 PC -16 PC -17 PC -19	L1.1 L2.1 L2.2 E1			
6.6	Meningococcal infection. Tick-borne encephalitis. / Prac /	8	4	PC-5 PC -8 PC -10 PC - 13 PC -14 PC -16 PC -17 PC -19	L1.1 L2.1 L2.2 E1			
6.7	Rabies. Poliomiелitis. / Prac /	8	4	PC-5 PC -8 PC -10 PC - 13 PC -14 PC -16 PC -17 PC -19	L1.1 L2.1 L2.2 E1			
6.8	Botulism. Tetanus. Module-6 / Prac /	8	4	PC-5 PC -8 PC -10 PC - 13 PC -14 PC -16 PC -17 PC -19	L1.1 L2.1 L2.2 E1			
6.9	West Nile encephalitis (WNE), St. Louis encephalitis (StLE), Powassan (POW), western equine encephalitis (WEE), eastern equine encephalitis (EEE), Colorado tick fever / SIW /	8	10	PC-5 PC -8 PC -10 PC - 13 PC -14 PC -16 PC -17 PC -19	L1.1 L2.1 L2.2 E1			report with presentation
<b>Section 7. Airborne and respiratory manifestation infections</b>								
7.1	Influenza / Lec /	8	2	PC-5 PC -8 PC -10 PC - 13 PC -14 PC -16 PC -17 PC -19	L1.1 L2.1 L2.2 L3.1 E1			
7.2	Coronavirus infection / Lec /	8	2	PC-5 PC -8 PC -10 PC - 13 PC -14 PC -16 PC -17 PC -19	L1.1 L2.1 L2.2 L3.1 E1			
7.3	Diphtheria. / Lec /	8	2	PC-5 PC -8 PC -10 PC - 13 PC -14 PC -16 PC -17 PC -19	L1.1 L2.1 L2.2 L3.1 E1			
7.4	Influenza, Parainfluenza, Coronavirus infection. SARS and other emergency conditions with acute respiratory infections. / Prac /	8	4	PC-5 PC -8 PC -10 PC - 13 PC -14 PC -16 PC -17 PC -19	L1.1 L2.1 L2.2 L3.1 E1	4	role-play: emergency care for acute respiratory viral infections (convulsions, hyperthermia, respiratory failure, croup)	
7.5	Rhinovirus. Respiratory syncytial infection. Adenovirus. Obstructive syndrome in acute respiratory viral infections. / Prac /	8	4	PC-5 PC -8 PC -10 PC - 13 PC -14 PC -16 PC -17 PC -19	L1.1 L2.1 L2.2 L3.1 E1			
7.6	Pertussis. Diphtheria. Mumps. Module-7 / Prac /	8	4	PC-5 PC -8 PC -10 PC - 13 PC -14 PC -16 PC -17 PC -19	L1.1 L2.1 L2.2 L3.1 E1			

7.7	Moraxella catarrhalis. Mycoplasma pneumonia. Chlamydia pneumonia. Psittacosis (Chlamydia psittaci). Human Metapneumovirus. Hantavirus Pulmonary Syndrome / SIW /	8	10	PC-5 PC -8 PC -10 PC - 13 PC -14 PC -16 PC -17 PC -19	L1.1 L2.1 L2.2 L3.1 E1			report with presentation
<b>Section 8. Infection with skin lesion</b>								
8.1	Measles / Lec /	8	2	PC-5 PC -8 PC -10 PC - 13 PC -14 PC -16 PC -17 PC -19	L1.1 L2.1 L2.2 L3.2 E1			
8.2	Scarlet fever / Lec /	8	2	PC-5 PC -8 PC -10 PC - 13 PC -14 PC -16 PC -17 PC -19	L1.1 L2.1 L2.2 L3.2 E1			
8.3	Erysipelas / Lec /	8	2	PC-5 PC -8 PC -10 PC - 13 PC -14 PC -16 PC -17 PC -19	L1.1 L2.1 L2.2 L3.2 E1			
8.4	Chickenpox / Lec /	8	2	PC-5 PC -8 PC -10 PC - 13 PC -14 PC -16 PC -17 PC -19	L1.1 L2.1 L2.2 L3.2 E1			
8.5	Measles. Rubella. Parvovirus B19. / Prac /	8	4	PC-5 PC -8 PC -10 PC - 13 PC -14 PC -16 PC -17 PC -19	L1.1 L2.1 L2.2 L3.2 E1			
8.6	Pseudotuberculosis, Scarlet fever, Erysipelas / Prac /	8	4	PC-5 PC -8 PC -10 PC - 13 PC -14 PC -16 PC -17 PC -19	L1.1 L2.1 L2.2 L3.2 E1			
8.7	Chickenpox. Shingles. Module-8. / Prac /	8	4	PC-5 PC -8 PC -10 PC - 13 PC -14 PC -16 PC -17 PC -19	L1.1 L2.1 L2.2 E1			
8.8	Roseola (Human Herpesviruses 6, 7 and 8). Papillomaviruses. / SIW /	8	10	PC-5 PC -8 PC -10 PC - 13 PC -14 PC -16 PC -17 PC -19	L1.1 L2.1 L2.2 L3.2 E1			report with presentation
8.9	Differential diagnosis of rash syndrome. / SIW /	8	8	PC-5 PC -8 PC -10 PC - 13 PC -14 PC -16 PC -17 PC -19	L1.1 L2.1 L2.2 L3.2 E1			report with presentation
<b>Section 9. Infections with multiple organ dysfunction and lymphadenopathy syndrome</b>								
9.1	Infectious mononucleosis. / Lec /	8	2	PC-5 PC -8 PC -10 PC - 13 PC -14 PC -16 PC -17 PC -19	L1.1 L2.1 L2.2 E1			
9.2	Toxoplasmosis. / Lec /	8	2	PC-5 PC -8 PC -10 PC - 13 PC -14 PC -16 PC -17 PC -19	L1.1 L2.1 L2.2 E1			
9.3	HIV-infection / Lec /	8	2	PC-5 PC -8 PC -10 PC - 13 PC -14 PC -16 PC -17 PC -19	L1.1 L2.1 L2.2 E1			

9.4	Epstein Barr infection. Cytomegalovirus infection. HIV- infection. / Prac /	8	4	PC-5 PC -8 PC -10 PC - 13 PC -14 PC -16 PC -17 PC -19	L1.1 L2.1 L2.2 E1			
9.5	Toxoplasmosis. Brucellosis. Mumps. Module-9 / Prac /	8	4	PC-5 PC -8 PC -10 PC - 13 PC -14 PC -16 PC -17 PC -19	L1.1 L2.1 L2.2 E1			
9.6	Haemophilus influenzae (Hib). Nonpolio Enteroviruses. Legionellosis. / SIW /	8	10	PC-5 PC -8 PC -10 PC - 13 PC -14 PC -16 PC -17 PC -19	L1.1 L2.1 L2.2 E1			report with presentation
<b>Section 10. Tropical infections of bacterial and protozoal origin</b>								
10.1	Leprosy (Hansen's disease) / Lec /	8	2	PC-5 PC -8 PC -10 PC - 13 PC -14 PC -16 PC -17 PC -19	L1.1 L2.1 L2.2 E1			
10.2	Leishmaniasis / Lec /	8	2	PC-5 PC -8 PC -10 PC - 13 PC -14 PC -16 PC -17 PC -19	L1.1 L2.1 L2.2 E1			
10.3	Leprosy (Hansen's disease). Tropical non-venereal treponematoses. Yaws. Pinta. / Prac /	8	4	PC-5 PC -8 PC -10 PC - 13 PC -14 PC -16 PC -17 PC -19	L1.1 L2.1 L2.2 E1			
10.4	Leishmaniasis. Trypanosomiasis. / Prac /	8	4	PC-5 PC -8 PC -10 PC - 13 PC -14 PC -16 PC -17 PC -19	L1.1 L2.1 L2.2 E1			
10.5	Wuchereria bancroft infection. Brugia malayi infection. Loiasis. / Prac /	8	4	PC-5 PC -8 PC -10 PC - 13 PC -14 PC -16 PC -17 PC -19	L1.1 L2.1 L2.2 E1			
10.6	Module-10 / Prac /	8	4	PC-5 PC -8 PC -10 PC - 13 PC -14 PC -16 PC -17 PC -19	L1.1 L2.1 L2.2 E1			
10.7	Credit class / Prac /	8	4	PC-5 PC -8 PC -10 PC - 13 PC -14 PC -16 PC -17 PC -19	L1.1 L2.1 L2.2 E1			
10.8	/ Control /	8	0,5	PC-5 PC -8 PC -10 PC - 13 PC -14 PC -16 PC -17 PC -19	L1.1 L2.1 L2.2 E1			
10.9	/ Exam /	8	35,5	PC-5 PC -8 PC -10 PC - 13 PC -14 PC -16 PC -17 PC -19	L1.1 L2.1 L2.2 E1			

## 5. ASSESSMENT FUND

### 5.1. Advancement questions and assignments

#### *Test questions for the "Gastrointestinal Infection" module:*

- 1) Name the main pathogens causing shigellosis and their species-specific differences.
- 2) What is the leading role of the large intestine in the pathogenesis of shigellosis?
- 3) What clinical forms of shigellosis are distinguished by severity?
- 4) What laboratory diagnostic methods are used for shigellosis?
- 5) What are the main areas of specific and nonspecific prevention of shigellosis?
- 6) What is the source and mechanism of transmission of the typhoid fever pathogen?
- 7) Describe the pathogenesis of typhoid fever (the role of the reticuloendothelial system).
- 8) What are the typical clinical symptoms of typhoid fever?
- 9) What serological tests are used to diagnose typhoid fever?
- 10) What are the main preventive measures and vaccinations against typhoid fever?
- 11) List the main serological groups of salmonellosis pathogens.
- 12) What are the main routes of human salmonellosis infection?
- 13) Name the clinical forms of salmonellosis and their characteristics. What methods are used to confirm the diagnosis of salmonellosis?
- 14) Describe the principles of treatment and prevention of salmonellosis.
- 15) What is the causative agent of cholera and its biological properties?
- 16) Describe the main stages of cholera pathogenesis.
- 17) What is the typical clinical presentation of cholera?
- 18) Name the laboratory methods for confirming the diagnosis of cholera.
- 19) The main preventive measures and anti-epidemic measures for cholera.
- 20) Identify the causative agent of rotavirus infection and its characteristics.
- 21) Describe the routes of rotavirus transmission and the mechanism of infection.
- 22) What are the characteristics of diarrhea associated with rotavirus infection?
- 23) What diagnostic methods are used to detect rotavirus?
- 24) What are the principles of treatment and prevention of rotavirus infection?
- 25) What are the sources of infection and routes of transmission for intestinal yersiniosis?
- 26) Name the main clinical forms of intestinal yersiniosis.
- 27) Describe the pathogenesis of the disease (the role of mesenteric lymph nodes).
- 28) What laboratory methods are used for diagnosis?
- 29) Principles of treatment and prevention of intestinal yersiniosis.
- 30) What is foodborne toxic infection and what are its pathogens?
- 31) The main conditions that contribute to the development of foodborne toxic infections.
- 32) What is the clinical picture of foodborne toxic infection?
- 33) What laboratory tests confirm the diagnosis of foodborne toxic infection?
- 34) The main preventive measures against foodborne toxic infections.
- 35) Name the pathogen causing amebiasis and its stages of development.
- 36) What are the routes of transmission of amebiasis?
- 37) Describe the clinical manifestations of intestinal amebiasis.
- 38) What methods are used for laboratory diagnosis of amebiasis?
- 39) Principles of treatment and prevention of amebiasis.
- 40) What types of pathogenic *Escherichia coli* cause intestinal infections in humans?
- 41) What is the role of *Escherichia coli* virulence factors in the pathogenesis of the disease?
- 42) What are the main clinical forms of Escherichiosis?
- 43) What laboratory methods are used to diagnose Escherichiosis?
- 44) Principles of treatment and prevention of Escherichiosis.
- 45) The causative agent of giardiasis, its morphological forms, and modes of transmission.
- 46) What are the main mechanisms of intestinal damage in giardiasis?
- 47) The main clinical manifestations of giardiasis in adults and children.
- 48) What laboratory diagnostic methods are used for giardiasis?
- 49) Principles of treatment and prevention of giardiasis.

#### *Test questions for the "Viral Hepatitis" module:*

- 1) What is the causative agent of hepatitis A and to which virus family does it belong?
- 2) What are the main routes of transmission of hepatitis A virus (HAV)?
- 3) Describe the mechanism of liver damage in hepatitis A.
- 4) What is the incubation period of hepatitis A?
- 5) What are the main clinical features of the pre-icteric and icteric stages?
- 6) Which laboratory tests are used for the diagnosis of hepatitis A?
- 7) What is the significance of anti-HAV IgM and anti-HAV IgG?
- 8) What complications can occur in hepatitis A?
- 9) What are the basic principles of treatment for hepatitis A?
- 10) Describe the main preventive measures, including vaccination, for hepatitis A.
- 11) What type of virus causes hepatitis B and what is its genome structure?
- 12) What are the main routes of transmission of hepatitis B virus (HBV)?
- 13) Describe the pathogenesis of hepatitis B and the role of immune response in liver damage.

- 14) What are the main clinical forms of hepatitis B?
- 15) Which serological markers are used for the diagnosis of hepatitis B?
- 16) What does the presence of HBsAg, HBeAg, and anti-HBc IgM indicate?
- 17) What are the possible outcomes of acute hepatitis B infection?
- 18) How is chronic hepatitis B diagnosed and monitored?
- 19) What antiviral drugs are used in the treatment of hepatitis B?
- 20) Describe specific preventive measures, including hepatitis B vaccination.
- 21) What is the causative agent of hepatitis C and its classification?
- 22) How is hepatitis C virus (HCV) transmitted?
- 23) What are the main risk groups for HCV infection?
- 24) Describe the typical clinical course of acute and chronic hepatitis C.
- 25) What are the most important laboratory markers for hepatitis C diagnosis?
- 26) What is the role of HCV RNA testing in diagnosis and monitoring?
- 27) What complications can develop in chronic hepatitis C?
- 28) Name the main antiviral drugs used in the treatment of HCV infection.
- 29) Why is there no effective vaccine for hepatitis C?
- 30) What preventive measures can reduce the spread of hepatitis C?
- 31) What is the causative agent of hepatitis D and what makes it unique among hepatitis viruses?
- 32) What is the relationship between hepatitis D virus (HDV) and hepatitis B virus (HBV)?
- 33) Explain the difference between co-infection and superinfection in hepatitis D.
- 34) What are the main routes of HDV transmission?
- 35) What are the clinical features of hepatitis D?
- 36) Which laboratory tests confirm HDV infection?
- 37) What complications are associated with chronic hepatitis D?
- 38) What is the role of interferon therapy in hepatitis D treatment?
- 39) How does vaccination against hepatitis B prevent hepatitis D infection?
- 40) Describe the main methods of prevention and control of hepatitis D.
- 41) What is the etiological agent of hepatitis E and its family classification?
- 42) What are the main routes of transmission of hepatitis E virus (HEV)?
- 43) Describe the epidemiological characteristics of hepatitis E.
- 44) What is the typical clinical course of hepatitis E infection?
- 45) Why is hepatitis E considered particularly dangerous for pregnant women?
- 46) What laboratory methods are used to diagnose hepatitis E?
- 47) What complications may occur in severe cases of hepatitis E?
- 48) What are the main principles of treatment for hepatitis E?
- 49) Is there a vaccine available for hepatitis E? If so, where is it used?
- 50) Describe the general preventive and sanitary measures for hepatitis E control.

**Test questions for the "Vector-Born Infections" module:**

- 1) What species of plasmodia cause malaria in humans?
- 2) What is the primary mode of malaria transmission?
- 3) What is the role of the Anopheles mosquito in the life cycle of the malaria parasite?
- 4) Describe the stages of plasmodium development in the human body.
- 5) What forms of malaria are distinguished by the length of the incubation period and severity?
- 6) What is a malarial paroxysm and what are its phases?
- 7) What are the main laboratory methods for diagnosing malaria?
- 8) What medications are used to treat acute attacks of malaria?
- 9) What does malaria prevention include at the individual and community level?
- 10) What is the difference between a relapse and reinfection in malaria?
- 11) What is the causative agent of North Asian tick-borne rickettsiosis, and to what group of microorganisms does it belong?
- 12) What morphological and biological characteristics are characteristic of the North Asian tick-borne rickettsiosis pathogen (*Rickettsia sibirica*)?
- 13) Who is the main source and reservoir of the pathogen in nature?
- 14) What are the vectors of North Asian tick-borne rickettsiosis?
- 15) What is the primary mechanism and route of infection for humans?
- 16) Describe the pathogenesis of North Asian tick-borne rickettsiosis.
- 17) What are the typical clinical manifestations of the disease (fever, rash, primary affect)?
- 18) What laboratory tests are used to diagnose North Asian tick-borne rickettsiosis?
- 19) Which antibiotics are the drugs of choice for the treatment of North Asian tick-borne rickettsiosis?
- 20) What are the preventive measures for the individual and community?
- 21) What is the causative agent of typhus and what are its main morphological features?
- 22) Who is the source and vector of typhus infection?
- 23) What is the mechanism of transmission of the typhus pathogen?
- 24) Describe the pathogenesis of typhus.
- 25) What are the main clinical manifestations of the disease?
- 26) What are the typical nervous system manifestations of typhus?
- 27) What laboratory tests are used to confirm the diagnosis of typhus?
- 28) What antibiotics are the drugs of choice for the treatment of typhus?
- 29) What are the specific and nonspecific preventive measures for typhus?

- 30) How does Brill-Zinsser disease differ from classic typhus?
- 31) What is the causative agent of epidemic relapsing fever, and to what genus does it belong?
- 32) What is the source and vector of infection in epidemic relapsing fever?
- 33) How does a person become infected with epidemic relapsing fever?
- 34) Describe the pathogenesis of epidemic relapsing fever.
- 35) What phases of the disease are distinguished in the clinical course of epidemic relapsing fever?
- 36) What is the mechanism of relapses in epidemic relapsing fever?
- 37) What laboratory methods are used to diagnose relapsing fever?
- 38) What complications are possible in severe cases of epidemic relapsing fever?
- 39) What antibiotics and medications are used to treat epidemic relapsing fever?
- 40) What are the main preventive measures for the population and healthcare workers during epidemic relapsing fever?
- 41) What is the causative agent of endemic relapsing fever, and how does it differ from the causative agent of the epidemic form?
- 42) Who is the source and vector of infection in endemic relapsing fever?
- 43) What are the mechanisms and routes of transmission in endemic relapsing fever?
- 44) What is the incubation period for endemic relapsing fever?
- 45) What are the clinical features of endemic relapsing fever compared to the epidemic form?
- 46) How often do relapses of endemic relapsing fever occur, and what causes them?
- 47) What laboratory diagnostic methods are used for endemic relapsing fever?
- 48) What are the treatment strategies for patients with endemic relapsing fever?
- 49) What preventive and vector control measures are most effective for endemic relapsing fever?
- 50) In which regions is endemic relapsing fever most common?
- 51) What is the causative agent of Q fever, and to what group of microorganisms does it belong?
- 52) What are the natural and reservoir sources of the Q fever pathogen?
- 53) What is the primary route of human infection with Q fever?
- 54) Describe the pathogenesis of Q fever.
- 55) What are the main clinical forms of Q fever?
- 56) What laboratory tests are used to confirm the diagnosis of Q fever?
- 57) What is the role of serological testing in the diagnosis of Q fever?
- 58) Which antibiotics are most effective in treating Q fever?
- 59) What preventive measures are taken against Q fever among the general population and livestock workers?
- 60) How does acute Q fever differ from chronic Q fever?
- 61) What is the causative agent of cat scratch disease and its main characteristics?
- 62) How does cat scratch disease affect humans?
- 63) What are the main risk groups for cat scratch disease?
- 64) Describe the incubation period and initial manifestations of cat scratch disease.
- 65) What are the typical clinical signs of cat scratch disease?
- 66) What diagnostic methods are used if cat scratch disease is suspected?
- 67) How can cat scratch disease be distinguished from tuberculous lymphadenitis?
- 68) What antibiotics are used to treat cat scratch disease?
- 69) What are the preventive measures for cat scratch disease?
- 70) What is the likely course and outcome of cat scratch disease if left untreated?

**Test questions for the "Highly contagious or quarantine infections" module:**

- 1) What is the causative agent of plague and to which family does it belong?
- 2) What are the main reservoirs and sources of infection in nature?
- 3) How is plague transmitted to humans?
- 4) What are the main clinical forms of plague?
- 5) Describe the pathogenesis of bubonic plague.
- 6) What are the characteristic clinical features of pneumonic plague?
- 7) Which laboratory methods are used for diagnosis of plague?
- 8) What antibiotics are effective in the treatment of plague?
- 9) What measures are taken for the prevention and control of plague outbreaks?
- 10) What differentiates bubonic plague from septicemic plague?
- 11) What is the causative agent of anthrax and what are its morphological features?
- 12) What are the main reservoirs and sources of anthrax infection?
- 13) How is anthrax transmitted to humans?
- 14) What are the main clinical forms of anthrax?
- 15) What is the pathogenesis of cutaneous anthrax?
- 16) What are the characteristic features of the anthrax carbuncle?
- 17) Which laboratory tests are used to confirm the diagnosis of anthrax?
- 18) What is the treatment for anthrax?
- 19) What vaccines are used for anthrax prevention?
- 20) What are the main public health measures to prevent anthrax outbreaks?
- 21) What is the causative agent of tularemia and to which genus does it belong?
- 22) What are the main natural reservoirs and vectors of tularemia?
- 23) What are the routes of transmission to humans?
- 24) Describe the main clinical forms of tularemia.
- 25) What is the pathogenesis of ulceroglandular tularemia?

- 26) What are the characteristic clinical manifestations of tularemia?
- 27) What laboratory methods are used for diagnosis of tularemia?
- 28) What antibiotics are most effective in tularemia treatment?
- 29) What specific prophylaxis is available for tularemia?
- 30) What are the main differences between tularemia and plague?
- 31) What viruses cause hemorrhagic fever with renal syndrome?
- 32) What are the natural reservoirs and sources of infection?
- 33) How is the infection transmitted to humans?
- 34) Describe the main stages (phases) of the disease.
- 35) What are the characteristic clinical features of HFRS?
- 36) What laboratory changes are typical in patients with HFRS?
- 37) What are the main complications of severe HFRS?
- 38) What are the principles of treatment of HFRS?
- 39) What preventive measures are used against HFRS in endemic areas?
- 40) What differentiates HFRS from leptospirosis and other febrile diseases?
- 41) What is the causative agent of smallpox and what family does it belong to?
- 42) What is the mechanism of transmission of smallpox?
- 43) Describe the pathogenesis of smallpox infection.
- 44) What are the stages of the disease and their main clinical manifestations?
- 45) What is the typical smallpox rash and how does it differ from varicella?
- 46) What complications may occur in smallpox patients?
- 47) How is smallpox diagnosed in laboratory settings?
- 48) What was the role of vaccination in smallpox eradication?
- 49) What are the key infection control measures in case of smallpox suspicion?
- 50) Why is smallpox considered eradicated, and what biosafety measures exist for stored virus samples?

***Test questions for the "Tropical diseases of viral origin" module:***

- 1) What is the causative agent of dengue fever and how is it transmitted?
- 2) What mosquito species serves as the main vector of dengue virus?
- 3) What are the main clinical manifestations of classical dengue fever?
- 4) What are the key features distinguishing dengue hemorrhagic fever from classical dengue?
- 5) What preventive measures are used to control dengue transmission?
- 6) What is the causative agent of yellow fever and to which virus family does it belong?
- 7) How is yellow fever transmitted to humans?
- 8) What are the characteristic clinical stages of yellow fever?
- 9) What laboratory findings are typical in yellow fever?
- 10) What specific preventive measure is available against yellow fever?
- 11) What is the causative agent of Ebola virus disease and what family does it belong to?
- 12) How is Ebola virus transmitted between humans?
- 13) What are the major clinical symptoms and complications of Ebola virus disease?
- 14) What biosafety precautions are necessary when handling suspected Ebola patients or samples?
- 15) What measures are taken for prevention and outbreak control of Ebola virus disease?
- 16) What is the causative agent of Marburg virus disease and its natural reservoir?
- 17) How does transmission of Marburg virus occur?
- 18) What are the main clinical manifestations and complications of the Marburg HF?
- 19) What laboratory tests are used for confirmation of Marburg virus infection?
- 20) What infection control and preventive measures are recommended during outbreaks of Marburg HF?
- 21) What is the causative agent of Chikungunya fever and how is it transmitted?
- 22) What are the main clinical features of Chikungunya fever?
- 23) What is the typical course and duration of joint involvement in Chikungunya fever?
- 24) How is Chikungunya fever differentiated from dengue fever clinically?
- 25) What vector control strategies are important for Chikungunya fever prevention?
- 26) What is the causative agent of West Nile fever and what is its main vector?
- 27) What are the main reservoirs of West Nile virus in nature?
- 28) What are the common clinical forms of West Nile infection in humans?
- 29) Which laboratory methods are used for diagnosis of West Nile virus infection?
- 30) What are the main preventive measures against West Nile virus transmission?

***Test questions for the "Infection with neurological disorders" module:***

- 1) What is the causative agent of meningococcal infection?
- 2) What are the main routes of transmission of Neisseria meningitidis?
- 3) What are the main clinical forms of meningococcal infection?
- 4) Describe the pathogenesis of meningococcal meningitis.
- 5) What are the characteristic symptoms of meningococcal meningitis?
- 6) What laboratory methods are used for the diagnosis of meningococcal infection?
- 7) What are the features of meningococemia (meningococcal septicemia)?
- 8) Which antibiotics are used for treatment of meningococcal infection?

- 9) What are the possible complications of meningococcal disease?
- 10) What specific and nonspecific preventive measures exist for meningococcal infection?
- 11) What is the causative agent of tick-borne encephalitis (TBE) and its virus family?
- 12) How is TBE transmitted to humans?
- 13) What are the main epidemiological features of TBE?
- 14) Describe the pathogenesis and target organs affected by TBE virus.
- 15) What are the clinical stages and main symptoms of TBE?
- 16) How is TBE diagnosed in laboratory settings?
- 17) What complications may develop after tick-borne encephalitis?
- 18) What is the main principle of treatment for TBE?
- 19) What specific prophylaxis is available for TBE?
- 20) What measures are taken for individual protection against tick bites?
- 21) What is the causative agent of rabies and what are its main characteristics?
- 22) How is the rabies virus transmitted to humans?
- 23) What are the main reservoirs and sources of rabies infection?
- 24) Describe the pathogenesis and target structures in rabies.
- 25) What are the main clinical stages of rabies in humans?
- 26) What are the early symptoms and typical neurological signs of rabies?
- 27) What laboratory methods can confirm rabies infection?
- 28) What are the principles of post-exposure prophylaxis for rabies?
- 29) What vaccines and immunoglobulins are used in rabies prevention?
- 30) What measures are taken to control rabies in animal populations?
- 31) What is the causative agent of poliomyelitis and what virus family does it belong to?
- 32) What are the routes of transmission of poliovirus?
- 33) What is the main pathogenesis of poliomyelitis?
- 34) What are the main clinical forms of poliomyelitis?
- 35) Which signs indicate involvement of the central nervous system for poliomyelitis?
- 36) What laboratory tests are used to confirm poliomyelitis?
- 37) What complications can arise after acute poliomyelitis?
- 38) What are the main approaches to treatment and supportive care for poliomyelitis?
- 39) What types of poliovirus vaccines are available?
- 40) What global strategies are used for poliomyelitis eradication?
- 41) What is the causative agent of botulism and what toxin does it produce?
- 42) What are the main sources and routes of botulism infection?
- 43) Describe the mechanism of action of botulinum toxin.
- 44) What are the typical clinical symptoms of botulism?
- 45) How can botulism be distinguished from other paralytic disorders?
- 46) What laboratory methods are used for confirming botulism diagnosis?
- 47) What is the main principle of treatment for botulism?
- 48) What is the role of antitoxin serum therapy in treatment for botulism?
- 49) What are the main complications of botulism?
- 50) What preventive measures help avoid botulism outbreaks?
- 51) What is the causative agent of tetanus and what is its toxin called?
- 52) How does *Clostridium tetani* enter the human body?
- 53) What are the predisposing factors for tetanus infection?
- 54) Describe the mechanism of action of tetanospasmin.
- 55) What are the characteristic clinical symptoms of tetanus?
- 56) What are the differences between localized and generalized tetanus?
- 57) How is tetanus diagnosed clinically and in the laboratory?
- 58) What is the main treatment for tetanus, including antitoxin use?
- 59) What vaccines are used for active immunization against tetanus?
- 60) What measures constitute emergency (post-exposure) prophylaxis for tetanus?

***Test questions for the "Respiratory tract infections" module:***

- 1) What is the causative agent of influenza and what virus does family belong to?
- 2) What are the main routes of influenza virus transmission?
- 3) What are the characteristic clinical symptoms of influenza?
- 4) What complications may occur after influenza infection?
- 5) What specific and nonspecific preventive measures are used against influenza?
- 6) What viruses cause parainfluenza and to which family do they belong?
- 7) What are the main clinical manifestations of parainfluenza?
- 8) What is the typical age group most affected by parainfluenza infection?
- 9) What laboratory methods are used to confirm parainfluenza infection?
- 10) What are the main preventive measures for parainfluenza?
- 11) What are the main types of human coronaviruses that cause respiratory infections?
- 12) How is coronavirus transmitted between people?
- 13) What are the main clinical symptoms of coronavirus infection?
- 14) What laboratory and instrumental methods are used for coronavirus infection diagnosis?
- 15) What are the main strategies for prevention and control of coronavirus infection?

- 16) What is the causative agent of the rhinovirus infection (common cold) and to which virus family does it belong?
- 17) What are the main routes of transmission for rhinovirus infection?
- 18) What are the typical clinical manifestations of rhinovirus infection?
- 19) What complications of rhinovirus infection (common cold) can occur in children and immuno-compromised patients?
- 20) What preventive measures help reduce the spread of rhinovirus infection?
- 21) What is the causative agent of respiratory syncytial infection (RS-infection)?
- 22) What are the main clinical features of RS infection in infants and young children?
- 23) What complications are most dangerous in severe RS infection?
- 24) What laboratory tests confirm the diagnosis of RS infection?
- 25) What are the preventive and therapeutic approaches for RS infection?
- 26) What is the causative agent of adenovirus infection and how is it transmitted?
- 27) What are the main clinical syndromes caused by adenoviruses?
- 28) What are the characteristic symptoms of adenoviral pharyngoconjunctival fever?
- 29) How is adenovirus infection diagnosed in the laboratory?
- 30) What measures are used for prevention and control of adenoviral infections?
- 31) What is the causative agent of pertussis and what are its main virulence factors?
- 32) What are the stages of the clinical course of pertussis?
- 33) What are the characteristic symptoms of the paroxysmal stage of pertussis?
- 34) What are the possible complications of pertussis, especially in infants?
- 35) What vaccines are used for specific prevention of pertussis?
- 36) What is the causative agent of diphtheria and its main pathogenic factor?
- 37) What are the main clinical forms of diphtheria?
- 38) What are the characteristic features of diphtheritic pharyngitis?
- 39) What laboratory tests are used to confirm the diagnosis?
- 40) What are the principles of treatment and prevention of diphtheria?
- 41) What are the main causes of SARS?
- 42) What pathophysiological mechanisms lead to respiratory failure in ARDS (SARS)?
- 43) What are the key clinical and radiological signs of ARDS (SARS)?
- 44) What supportive treatments are essential in the management of ARDS (SARS)?
- 45) What complications may develop during prolonged ARDS (SARS)?
- 46) What is croup syndrome and which pathogens most commonly cause it?
- 47) What are the main clinical features and symptoms of croup?
- 48) What age group is most frequently affected by croup?
- 49) What emergency treatments are used for severe croup with airway obstruction?
- 50) What preventive measures reduce the incidence of croup syndrome?

**Test questions for the "Infection with skin lesion" module:**

- 1) What is the causative agent of measles and what virus family does it belong to?
- 2) What are the main routes of transmission of measles?
- 3) What are the characteristic clinical features of measles (prodrome, enanthem, exanthem)?
- 4) What are common complications associated with measles?
- 5) What vaccines and preventive measures are used against measles?
- 6) What virus causes rubella and how is it transmitted?
- 7) What are the main clinical symptoms of rubella in children and adults?
- 8) What are the risks of rubella infection during pregnancy?
- 9) How is rubella diagnosed in the laboratory?
- 10) What vaccination strategies are used to prevent rubella?
- 11) What is the causative agent of human parvovirus infection and what family does it belong to?
- 12) What are the main clinical manifestations of parvovirus B19 infection?
- 13) What complications of parvovirus B19 can occur in pregnant women or immunocompromised patients?
- 14) How is parvovirus infection diagnosed in the laboratory?
- 15) What preventive measures are used to reduce the risk of parvovirus infection?
- 16) What is the causative agent of pseudotuberculosis and what are its main characteristics?
- 17) What are the main routes of pseudotuberculosis transmission to humans?
- 18) What clinical syndromes are associated with pseudotuberculosis?
- 19) How is pseudotuberculosis diagnosed in the laboratory?
- 20) What preventive measures are recommended to avoid pseudotuberculosis?
- 21) What is the causative agent of scarlet fever and its main virulence factor?
- 22) What are the characteristic clinical signs of scarlet fever (rash, "strawberry tongue")?
- 23) How is scarlet fever distinguished from other exanthematous diseases?
- 24) What antibiotics are used for treatment of scarlet fever?
- 25) What preventive measures are applied to control scarlet fever outbreaks?
- 26) What is the causative agent of erysipelas and what type of infection does it cause?
- 27) What are the typical clinical manifestations of erysipelas?
- 28) What predisposing factors increase the risk of erysipelas?
- 29) What antibiotics are used for treatment of erysipelas?
- 30) What preventive measures reduce the incidence of erysipelas?
- 31) What virus causes chickenpox and what is its family?

- 32) How is chickenpox transmitted between humans?
- 33) What are the characteristic stages of the varicella rash?
- 34) What complications of chickenpox can occur in adults or immuno-compromised patients?
- 35) What vaccines are available for prevention of chickenpox?
- 36) What virus causes shingles and how is it related to chickenpox?
- 37) What triggers reactivation of the varicella-zoster virus?
- 38) What are the characteristic clinical features of shingles (rash, pain)?
- 39) How are shingles diagnosed clinically and in the laboratory?
- 40) What preventive measures, including vaccines, are available for shingles?

**Test questions for the "Infections with multiple organ dysfunction and lymphadenopathy syndrome" module:**

- 1) What virus causes infectious mononucleosis and what family does it belong to?
- 2) What are the characteristic clinical features of infectious mononucleosis (fever, pharyngitis, lymphadenopathy)?
- 3) How is infectious mononucleosis transmitted between individuals?
- 4) What laboratory tests are used to confirm the diagnosis of infectious mononucleosis?
- 5) What are the main complications and preventive measures associated with infectious mononucleosis?
- 6) What is the causative agent of cytomegalovirus infection (CMV) and its main characteristics?
- 7) How is CMV transmitted in humans?
- 8) What are the main clinical manifestations of CMV infection in immunocompetent and immunocompromised patients?
- 9) What laboratory methods are used for CMV diagnosis?
- 10) What preventive strategies are recommended to reduce the risk of CMV infection?
- 11) What virus causes HIV infection and what is its main target in the human body?
- 12) What are the primary routes of HIV transmission?
- 13) What are the stages of HIV infection and their characteristic clinical features?
- 14) What laboratory tests are used to diagnose HIV infection?
- 15) What are the main approaches to prevention and treatment of HIV/AIDS?
- 16) What is the causative agent of toxoplasmosis and what type of organism is it?
- 17) How is toxoplasmosis transmitted to humans?
- 18) What are the clinical manifestations of congenital and acquired toxoplasmosis?
- 19) What laboratory methods are used for the diagnosis of toxoplasmosis?
- 20) What preventive measures of toxoplasmosis are recommended, especially for pregnant women?
- 21) What bacteria cause brucellosis and what are their main characteristics?
- 22) What are the common sources and routes of brucellosis infection in humans?
- 23) What are the main clinical forms of brucellosis?
- 24) How is brucellosis diagnosed in the laboratory?
- 25) What preventive measures are used to control brucellosis in humans and animals?
- 26) What virus causes mumps and what virus family does it belong to?
- 27) How is mumps transmitted between humans?
- 28) What are the main clinical manifestations of mumps?
- 29) What complications may occur after mumps infection?
- 30) What vaccines and preventive measures are used to control mumps?

**Test questions for the "Tropical infections of bacterial and protozoal origin" module:**

- 1) What is the causative agent of leprosy and its main characteristics?
- 2) How is leprosy transmitted between humans?
- 3) What are the main clinical forms of leprosy?
- 4) What laboratory methods are used to confirm leprosy diagnosis?
- 5) What are the main treatment options and preventive strategies for leprosy?
- 6) What bacteria cause non-venereal treponematoses and how do they differ from *Treponema pallidum* (syphilis)?
- 7) What are the main routes of transmission for non-venereal treponematoses?
- 8) What are the characteristic clinical manifestations of non-venereal treponematoses?
- 9) How are non-venereal treponematoses diagnosed in the laboratory?
- 10) What measures of non-venereal treponematoses are used for treatment and prevention?
- 11) What protozoa cause leishmaniasis and what forms of the disease exist?
- 12) What are the main vectors of leishmaniasis?
- 13) What are the clinical features of cutaneous, mucocutaneous, and visceral leishmaniasis?
- 14) How is leishmaniasis diagnosed in the laboratory?
- 15) What treatments and preventive measures are recommended for leishmaniasis?
- 16) What protozoa cause trypanosomiasis and what are their main vectors?
- 17) What are the main clinical forms of African trypanosomiasis?
- 18) What are the clinical features of Chagas disease?
- 19) How is trypanosomiasis diagnosed in the laboratory?
- 20) What are the main preventive measures against trypanosomiasis?
- 21) What parasite causes *Wuchereria bancrofti* infection and what is its life cycle?
- 22) What is the main vector of wucheriasis?
- 23) What are the characteristic clinical features of lymphatic filariasis?
- 24) How is wucheriasis diagnosed in the laboratory?
- 25) What preventive measures are recommended to control wucheriasis?

- 26) What parasite causes brugian filariasis and which regions are most affected?
- 27) What is the main vector of *Brugia malayi*?
- 28) What are the clinical manifestations of brugian filariasis?
- 29) How is brugian filariasis diagnosed?
- 30) What preventive strategies are used to reduce transmission?
- 31) What parasite causes loiasis and what is its main vector?
- 32) What are the characteristic clinical signs of loiasis (Calabar swellings, eye migration)?
- 33) How is loiasis diagnosed in the laboratory?
- 34) What are the treatment options for loiasis?
- 35) What preventive measures of loiasis are used to avoid infection?

### 5.2. Course paper's themes

Coursework is not included in the curriculum.

### 5.3. Assessment Fund

Examples of MCQs

1. The combination of "rice water" stools, adynamia, sunken eyeballs, oliguria, muscle cramps of the extremities, subfebrile temperature and hypotension are characteristic of:
  - a) Rotavirus infection;
  - b) Salmonellosis;
  - c) Food poisoning;
  - d) Cholera;
  - e) Atypical dysentery.
2. What salmonella is most significant in the epidemiology of non-typhoidal salmonellosis?
  - a) *Salmonella paratyphi A*;
  - b) *Salmonella typhi*;
  - c) *Salmonella enteritidis*;
  - d) *Salmonella bareilly*;
  - e) *Salmonella anatum*.
3. What combination of symptoms is characteristic of cholera?
  - a) Copious, odorless, watery stools, lack of intoxication and abdominal pain;
  - b) Nausea, vomiting, copious watery stools, abdominal pain, intoxication;
  - c) Watery, fetid stools, pain around the navel, repeated vomiting;
  - d) Loose, greenish stools with mucus, diffuse abdominal pain;
  - e) Scanty stools with mucus and blood, cramping pains, intoxication.
4. The pathogenesis of malaria is based on:
  - a) Parasitaemia;
  - b) Electrolyte disorders;
  - c) Anemia;
  - d) Hemodynamic disorders;
  - e) All of the above.
5. An incorrect statement regarding the pathogenesis of malaria is:
  - a) malarial paroxysms occur when parasitemia reaches a pyrogenic level;
  - b) the occurrence of paroxysm is due to the lysis of erythrocytes and the entry into the blood of the pathogen and its metabolic products;
  - c) with a high intensity of tissue schizogony, the development of seizures is also possible;
  - d) with all forms of malaria, the development of early relapses is possible;
  - e) immunity against malaria is unstable, non-sterile.
6. Leptospirosis is characterized by:
  - a) Facial hyperemia, scleral vascular injection, conjunctival hyperemia;
  - b) Enlargement of the liver from 2-3 days of illness;
  - c) Enlargement of the spleen in less than 50% of patients;
  - d) Low blood pressure;
  - e) All of the above.
7. Pathological changes in epidemic typhus are characterized by:
  - a) The presence of specific typhoid granulomas in the internal organs;
  - b) Enlargement of the spleen;
  - c) Intraorganic hemorrhages;
  - d) Meningoencephalitis;
  - e) All of the above

8. A 28-year-old man turned to the district doctor with complaints of fever up to 38°C, chills, sweating, general weakness, an ulcer on the skin of his right forearm. Sick for 10 days. Epidemiological data: participated in the slaughter of a neighbor's cow a week before the illness. Physical findings - on the skin of the lower third of the right forearm there is an ulcer with a black scab in the center, with pronounced edema around it, reddening of the skin around the scab. An examination of the internal organs did not reveal any abnormalities. The district doctor made a preliminary diagnosis: anthrax, cutaneous form. Which of the following medications is the most effective?

- a) Penicillin;
- b) Rifampicin;
- c) Erythromycin;
- d) Doxycycline;
- e) Gentamicin.

9. An incorrect statement regarding anthrax is:

- a) The source of infection are animals;
- b) A sick person is contagious;
- c) Foodborne infection is possible;
- d) The air-dust transmission path has a certain value;
- e) The contact route of transmission is more common.

10. With primary pneumonic plague, there is no:

- a) Severe intoxication;
- b) Bubo;
- c) Cough;
- d) Dyspnea;
- e) Bloody sputum.

#### *CLINICAL CHALLENGE Clinical challenge example for module #1:*

A 42 years old patient, applied to the medical center of the airport terminal. Delivered by comrades - members of the tourist group returning from India, where they were for 10 days. He fell ill at night on the plane - there was a rumbling in the stomach and loose watery stools. Before going to the doctor, he had defecated more than 20 times, three times - profuse vomiting with watery contents.

There was dizziness, and weakness increased. After 12 hours from the onset of the disease, the condition is extremely severe. Cyanosis of the skin, dry mucous membranes, speaks in a whisper. The eyeballs are sunken the face is pointed. Skin turgor is sharply reduced, a symptom of the "washerwoman's hand". The skin is cold, covered with sticky sweat. Body temperature 35.4°C. Periodically, the patient becomes agitated, there are cramps in the limbs. Tongue dry, covered with brown coating. Shortness of breath - 34 per minute. The pulse is threadlike; the heart rate is 130 beats/min. BP 30/0 mmHg The abdomen is painless on palpation. Conscious. There are no meningeal phenomena.

#### **TASK:**

- 1) Make and substantiate the diagnosis and determine the degree of dehydration.
- 2) What measures should be taken when identifying a patient with cholera?
- 3) Assign rehydration therapy (the weight of the patient before the disease is 70 kg).
- 4) What tests should be performed in the intensive care unit to clarify the diagnosis, assess the severity of the disease?

#### *An example of an answer to a clinical challenge #1:*

- 1) Diagnosis: Cholera with IV degree of dehydration. The diagnosis was made based on an epidemiological history - the patient returned from India (an endemic region for cholera); medical history - fell ill at night, acutely, with rumbling in the stomach and liquid watery stools more than 20 times, profuse vomiting of watery contents. Rapid increase in weakness and symptoms of dehydration; physical findings - an extremely serious condition, cyanosis of the skin, sunken eyeballs, sharpened facial features, a symptom of "washerwoman's hands", the skin is cold, covered with sticky sweat, body temperature is 35.4°C, cramps of the extremities, shortness of breath - 34 per minute, thready pulse, heart rate 130 beats/min. BP 30/0 mmHg
- 2) When cholera is detected, it is necessary to take measures to localize and eliminate the focus: isolate the patient and those who have been in contact with him in an infectious diseases hospital, treat the patient and carry out preventive treatment of contact persons, impose a quarantine for 5 days, carry out current and final disinfection.
- 3) Rehydration therapy: for 1.5 hours, any polyionic solution is injected warmly into several veins at a rate of 150 ml per minute for 30 minutes, and then at a rate of 70 ml per minute in a volume of 7 liters. Then, every 2 hours, the volume of ongoing fluid losses is determined, compensating for it with intravenous drip infusion of saline solutions with correction of losses of potassium ions and considering laboratory indicators of acid-base balance, electrolytes, and hematocrit. In parallel, etiotropic treatment is prescribed - ciprofloxacin 500 mg intravenously 2 times a day for 5 days or doxycycline 200 mg per day for 5 days.
- 4) To clarify the diagnosis, vomit and feces should be cultured.

#### **EXAMPLE OF INTERPRETATION OF LABORATORY DATA:**

##### **IMMUNOASSAY FOR MARKERS OF VIRAL HEPATITIS**

anti-HAV-IgM – negative

anti-HEV-IgM – negative

HBsAg – positive

HBeAg – positive

anti-HBc-IgM – positive

anti-HCV (total) – negative

anti-HDV-IgG – negative

anti-HDV-IgM – negative

Conclusion: Acute viral hepatitis B.

**CURATION OF THE PATIENT**

1. Each student receives one patient with an infectious pathology for supervision.
2. The curator conducts a survey and examination of the patient according to the proposed scheme, studies the results of the available laboratory data, images, makes a preliminary diagnosis, conducts differential diagnostics, suggests a treatment regimen, additional examination methods.

## Curation scheme:

1. Passport data: Last name, first name, patronymic, age, marital status, education, profession, place of work, address, time and date of admission, diagnosis upon admission.
2. Complaints related to the disease that caused the hospitalization, then other complaints.
3. Medical history, epidemiological history, life history.
4. Objective data, characteristics of the general condition.
5. Interpretation of available laboratory data and images. Self-study topics are evaluated according to the submitted reports with presentations.

**MEDICAL HISTORY** The student independently writes the case history of an infectious patient according to the scheme presented in the APPENDIX.

**THEORETICAL TASK** (current control) includes:

- oral analysis of the topic;
- examination of patients;
- analysis of clinical cases;
- demonstration of training videos.

**CONTROL tests** (boundary control)

Students write a MCQs at the completion of each module.

**5.4. List of evaluation tools**

MCQ;  
Clinical challenge;  
Interpretation of laboratory data;  
Self-study: Report with presentation;  
Curation of the patient;  
Theoretical task;  
Medical history.

**6. COURSE (MODULE) METHODOLOGICAL AND INFORMATIONAL SUPPORT****6.1. Recommended reading****6.1.1. Required reading list**

	<i>Authors, Compilers</i>	<i>Title</i>	<i>Book publisher, year</i>
L1.1	Dennis L. Kasper, Anthony S. Fauci	HARRISON'S Infectious diseases. Textbook	17 <sup>th</sup> ed. New York, McGraw- Hill, 2008

**6.1.2. Advanced reading**

	<i>Authors, Compilers</i>	<i>Title</i>	<i>Book publisher, year</i>
L2.1	Robert M. Kliegman, Bonita F. Stanton, Joseph W. St Geme III et.al	Nelson textbook of pediatrics	Copyright © 2016 by Elsevier, Inc
L2.2	Frederick S.Southwick	Infectious diseases: A clinical short course	Copyright © 2007 by The McGraw-Hill Companies

**6.1.3 Guidance Papers**

	<i>Authors, Compilers</i>	<i>Title</i>	<i>Book publisher, year</i>
L.3.1	Kadyrova R.M., Chechetova S.V., Djolbunova Z.K., et.	Acute respiratory infections in children (clinical manifestation, laboratory diagnosis, treatment)	Methodical recommendations for medical students, 2016
L.3.2	Kadyrova R.M., Chechetova S.V., Djolbunova Z.K., et.	Exanthems in children (clinical manifestation, laboratory diagnosis, treatment)	Methodical recommendations for medical students, 2013
L.3.3	Kadyrova R.M., Chechetova S.V., Djolbunova Z.K., et.	Acute intestinal infections in children (clinical manifestation, laboratory diagnosis, treatment)	Methodical recommendations for medical students, 2009

L.3.4	Kadyrova R.M., Chechetova S.V., Djolbunova Z.K., et.	Acute viral hepatitis in children (clinical manifestation, laboratory diagnosis, treatment)	Methodical recommendations for medical students, 2017
<b>6.2 Online Resources</b>			
E1	Library KRSU		<a href="http://www.lib.krsu.edu.kg">http://www.lib.krsu.edu.kg</a>
E2	Educational activities of the department		<a href="https://infec.krsu.edu.kg/index.php/obrazovatel'naya-deyatelnost">https://infec.krsu.edu.kg/index.php/obrazovatel'naya-deyatelnost</a>
E3	UpToDate		<a href="http://www.wolterskluwer.com">http://www.wolterskluwer.com</a>
<b>6.3. List of Information and Education Technologies</b>			
<b>6.3.1 Competence-based Educational Technologies</b>			
6.3.1.1	Traditional educational technologies include lectures; theoretical and practical classes focused on the formation of a student's knowledge and practical skills. Educational material, intended for adoption, is provided to students in completed form. Practical classes are held based on the infectious diseases' hospital with mandatory curation of thematic patients.		
6.3.1.2	Innovative educational technologies consist in classes that form systemic thinking and the ability to generate ideas when solving various creative tasks, such as role-games, classes in a simulation center.		
6.3.1.3	Digital educational technologies are used in the form of independent use of Internet resources by students to perform practical tasks and self-study, familiarize themselves with photo and video materials from Internet sources in the relevant modules.		
<b>6.3.2 List of Information Reference Systems and Software</b>			
6.3.2.1	Library KRSU - <a href="http://www.lib.krsu.edu.kg">http://www.lib.krsu.edu.kg</a>		
6.3.2.2	Educational activities of the department - <a href="https://infec.krsu.edu.kg/index.php/obrazovatel'naya-deyatelnost">https://infec.krsu.edu.kg/index.php/obrazovatel'naya-deyatelnost</a>		
6.3.2.3	UpToDate - <a href="http://www.wolterskluwer.com">http://www.wolterskluwer.com</a>		
6.3.2.5	MedUniver <a href="https://meduniver.com">https://meduniver.com</a>		

### 7. COURSE (MODULE) LOGISTICS

7.1	Theoretical and practical training of the program on infectious diseases is carried out at the Department of Infectious Diseases located based on the Republican Clinical Infectious Diseases Hospital, which is designed for 400 beds, has 19 departments, clinical and bacteriological laboratories, an ultrasound room, an X-ray room, a fibroelastometry room.
7.2	The department has 5 classrooms for 10-15 seats each, a lecture hall for 120 seats, and an assistant room. All classrooms are equipped with furniture, light sources, and thematic sets of tabular material.
7.3	Technical equipment: 1 laptop, multimedia projector, multifunctional device (printer, scanner, copier), Internet access.
7.4	Visual aids: educational stands (7), educational tables (30), slides (270), photo albums (8), videos (12), educational case histories (14).
7.5	Lecture presentations on all topics of the lecture course (Power Point -27 pcs.)
7.6	To conduct interactive training, students are provided with access to the simulation center - the Center for Integrative and Practical Training of the KRSU, equipped with simulators, simulator mannequins, resuscitation equipment, etc.

### 8. COURSE (MODULE) PROFICIENCY METHODOICAL GUIDELINES (FOR STUDENT)

#### MODULE CONTROL BY DISCIPLINE INCLUDES:

1. Current control: the adoption of educational material in the class (lectures, practical classes, including attendance and activity are considered) and the implementation of mandatory tasks for self-study;
2. Boundary control: checking the completeness of knowledge and skills on the material of the whole module. The implementation of control tasks for the module is carried out in writing and is a mandatory component of this control.
3. Interm control - a complete documented part of the academic discipline (7<sup>th</sup> semester - credit, 8<sup>th</sup> semester - exam) - a set of closely related credit modules.

#### BASIC REQUIREMENTS FOR INTERMEDIATE CONTROL

When a student comes to an exam and (or) a credit class, he must have a record book with him, which he presents to the examiner at the beginning of the exam or to the teacher at the credit class. The teacher has the right to give credit in a subject without a survey, to those students who scored more than 60 points for the current and boundary control. At the intermediate control, the student must correctly answer the theoretical questions of the ticket - (knowledge), correctly complete the clinical challenge and interpret the laboratory data (skills, expertise).

During the intermediate control, the teacher sums up the results of the curation of the patient by students during the semester.

Intermediate control score:

- min 20 scores are awarded to check the competency KNOWLEDGE (when the student correctly formulates the basic concepts for the questions);
- 20-25 scores are awarded to check the competency of SKILLS and EXPERTISE (when a student correctly formulates the essence of a given challenge and gives recommendations on how to solve it);
- 25-30 scores are awarded to check the competency of SKILLS and EXPERTISE (when the student has correctly completed all the control tasks).

#### BASIC REQUIREMENTS FOR CURRENT CONTROL.

I. When constructing a practical lesson, teachers adhere to the following general indicative scheme:

1) Organizational stage of the lesson (up to 2% of the lesson time):

- a) roll call;
- b) homework for the next lesson;
- c) motivation of the topic of the current lesson;
- d) familiarization of students with the objectives and plan of the lesson;

2) Control and correction of the initial level of knowledge (up to 20% of the lesson time):

- a) test control options of I and III levels;
- b) correction by the teacher of theoretical knowledge of students;
- 3) The stage of demonstration by the teacher of practical skills and / or thematic patients (up to 15% of the lesson time);
- 4) The stage of independent work of students at the bedside of the patient (up to 45% of the lesson time);

5) The final stage of the lesson (up to 18% of the lesson time):

- a) final control of the formed practical skills and abilities in the analysis of patients examined by students;
- b) final control of the formed theoretical knowledge and skills, including by solving clinical challenge;
- c) summing up the results of the practical lesson (characterization by the teacher of the fulfillment by students of all the goals of the lesson and individual assessment of knowledge and skills).

#### RECOMMENDATIONS FOR THE USE OF LITERATURE.

Recommendations for working with literature. The theory of discipline (infectious diseases) becomes more understandable when, in addition to listening to lectures and studying notes, books are also studied. It is easier to master the discipline by sticking to one textbook and notes. It is recommended, in addition to "learning" information, to achieve a state of understanding of the subject of the discipline being studied. To conclude, it is recommended, after studying the paragraph, to perform a few simple exercises on this topic. In addition, it is very useful to mentally ask yourself the following questions (and try to answer them): what is this paragraph about, what new concepts have been introduced, what is their meaning, what will this give in practice?

#### Working off missed classes.

A student who is assessed unsatisfactorily in the current lesson is obliged to re-prepare this topic and answer it to the teacher at an individual interview. A lecture missed for no reason should be worked out orally or by writing an abstract on the missed topic. There are other ways to make up for missed lectures (questionnaires in practical classes, MCQ etc.). A lesson missed by a student without a valid reason is worked out in the form of duty in the admissions department of an infectious diseases' hospital and then, oral practice of the theoretical part of the lesson.

#### RECOMMENDATIONS FOR PREPARING A PRESENTATION REPORT

Multimedia presentations are a type of independent work of students to create visual information aids. This type of work requires coordination of the student's skills in collecting, systematizing, processing information, reflecting the main issues of the topic being studied, in digital form. The report is prepared by the students using Microsoft PowerPoint. The requirement for students to prepare a presentation and present it in class. The topic of the presentation is chosen by the student from the proposed list and must be agreed with the teacher and corresponds to the topic of the lesson.

##### Stages of preparing a presentation

1) Drawing up a presentation plan (problem statement; topic goals) Thinking through each slide, it is important to answer the questions:

- how does the idea of this slide reveal the main idea of the whole presentation?
- what will be shown on the slide?
- what will be said?
- how will the transition to the next slide be made?

2) Presentation requirements:

- Slides should be in the same style, in the same font, numbered.
- The title page is necessary to introduce you and the topic of your report to the audience.
- No more than 30 slides.
- The optimal number of lines per slide is from 6 to 11.
- A common mistake is to read the slide verbatim. It is best if detailed information (definitions, formulas) is written on the slide, and their meaningful meaning is said in words. Information on a slide can be more formal and rigorous than in a speech.
- The optimal switching speed is one slide per 1-2 minutes.
- It is welcome to use more drawings, pictures, formulas, graphs, tables in the presentation. You can use animation effects.
- When explaining tables, it is necessary to say what the rows correspond to and what the columns correspond to.
- Enter only those designations and concepts, without which the understanding of the main ideas of the report is impossible.
- In a short speech, one cannot repeat the same thought, even if in other words - time is precious.
- Any phrase should be said for some reason, then the performance will be solid and leave a good impression.
- The last slide with conclusions in short presentations is not necessary to pronounce.

3) The student is obliged to prepare and deliver a report within the strictly allotted time by the teacher, and on time.

#### CURATION OF THE PATIENT

During the curation process, the student must master the following practical skills:

1. purposefully collect a life history and a history of the disease, focusing on epidemiological history.
2. conduct an objective examination of the patient and evaluate the data obtained in accordance with the age norm (heart rate, respiratory rate, blood pressure, etc.)
3. highlight the leading clinical syndromes.
4. evaluate the available laboratory data (CBC, blood coagulation tests, liver tests, and other biochemical indicators of the functioning of organs, cerebrospinal fluid, bacteriological and serological tests, as well as X-ray, etc.).
5. draw up a plan for additional laboratory and instrumental examinations to confirm the proposed diagnosis;
6. formulate a detailed clinical diagnosis, guided by the classification of the disease;
7. prescribe adequate therapy, calculate the volume of injected solutions, prescribe adequate etiotropic therapy, determine single, daily and course doses of antibiotics; determine the prognosis of the disease in a particular patient;
8. to provide the necessary medical assistance at the prehospital stage with hypovolemic shock, with infectious-toxic shock, botulism, stenosing laryngotracheitis, bronchial obstruction, hyperthermia, convulsions, anaphylactic reactions.

**TECHNOLOGICAL MAPS OF THE DISCIPLINE**

**"INFECTIOUS DISEASES including Tropical Infections"**

*Course 4, semester 7, reporting – Credit*

<b>Section according to course outline</b>	<b>Control</b>	<b>Control method</b>	<b>Credit minimum (points)</b>	<b>Credit maximum (points)</b>	<b>Control schedule (week)</b>
<b>Section 1</b>					
<b><i>Gastrointestinal infections</i></b>	Current	Face-to-face conversation; Curation of the patient. SIW: Report with presentation. Attendance: 1 point is deducted for each missed and not completed lesson.	4	7	4
	Boundary	MCQ	4	7	
<b>Section 2</b>					
<b><i>Viral hepatitis</i></b>	Current	Face-to-face conversation; Curation of the patient. SIW: Report with presentation. Attendance: 1 point is deducted for each missed and not completed lesson.	4	7	7
	Boundary	MCQ	4	7	
<b>Section 3</b>					
<b><i>Vector-borne infections</i></b>	Current	Face-to-face conversation; Curation of the patient. SIW: Report with presentation. Attendance: 1 point is deducted for each missed and not completed lesson.	4	7	11
	Boundary	MCQ	4	7	
<b>Section 4</b>					
<b><i>Highly contagious and conventional infection</i></b>	Current	Face-to-face conversation; Curation of the patient. SIW: Report with presentation. Attendance: 1 point is deducted for each missed and not completed lesson.	4	7	13
	Boundary	MCQ	4	7	
<b>Section 5</b>					
<b><i>Tropical diseases of viral origin</i></b>	Current	Face-to-face conversation; Curation of the patient. SIW: Report with presentation. Attendance: 1 point is deducted for each missed and not completed lesson.	4	7	18
	Boundary	MCQ	4	7	
<b>Total per semester</b>			<b>40</b>	<b>70</b>	
<b><i>Intermediate Control (credit)</i></b>		MCQ; Clinical challenge. Interpretation of laboratory data.	<b>20</b>	<b>30</b>	18
<b>Semester rating by discipline</b>			<b>60</b>	<b>100</b>	

Course 4, semester 8, reporting – exam

Section according to course outline	Control	Control method	Credit minimum (points)	Credit maximum (points)	Control schedule (week)
<b>Section 6</b>					
<i>Infection with neurological disorders</i>	Current	Face-to-face conversation; Curation of the patient. SIW: Report with presentation. Attendance: 1 point is deducted for each missed and not completed lesson.	4	7	28
	Boundary	MCQ	4	7	
<b>Section 7</b>					
<i>Airborne and respiratory manifestation infections</i>	Current	Face-to-face conversation; Curation of the patient. SIW: Report with presentation. Attendance: 1 point is deducted for each missed and not completed lesson.	4	7	32
	Boundary	MCQ	4	7	
<b>Section 8</b>					
<i>Infection with skin lesion</i>	Current	Face-to-face conversation; Curation of the patient. SIW: Report with presentation. Attendance: 1 point is deducted for each missed and not completed lesson.	4	7	36
	Boundary	MCQ	4	7	
<b>Section 9</b>					
<i>Infections with multiple organ dysfunction and lymphadenopathy syndrome</i>	Current	Face-to-face conversation; Curation of the patient. SIW: Report with presentation. Attendance: 1 point is deducted for each missed and not completed lesson.	4	7	39
	Boundary	MCQ	4	7	
<b>Section 10</b>					
<i>Tropical infections of bacterial and protozoal origin</i>	Current	Face-to-face conversation; Curation of the patient. SIW: Report with presentation. Attendance: 1 point is deducted for each missed and not completed lesson.	4	7	40
	Boundary	MCQ	4	7	
<b>Total per semester</b>			<b>40</b>	<b>70</b>	
<i>Intermediate Control (exam)</i>		MCQ; Clinical challenge. Interpretation of laboratory data.	<b>20</b>	<b>30</b>	41
<b>Semester rating by discipline</b>			<b>60</b>	<b>100</b>	

## RATING SCALES

### CLINICAL CASE ASSESSMENT SCALE

(current and boundary controls)

N <sup>o</sup>	Indicator	Point (%)
1	Correctness of diagnosis	0-30
2	The correctness of the choice of the management algorithm	0-25
3	The correct choice of additional diagnostic methods	0-20
4	Correctness of treatment	0-25
Total		60-100

### LABORATORY TEST INTERPRETATION ASSESSMENT SCALE

(boundary control)

N <sup>o</sup>	Indicator	Point (%)
1	Correctness of the choice of laboratory test	0-10
2	Knowledge of the normal ranges of laboratory test	0-20
3	Correct interpretation of laboratory test results	0-70
Total		60-100

### PATIENT CARE ASSESSMENT SCALE

(current control)

N <sup>o</sup>	Indicator	Point (%)
1	Compliance with infection control (medical uniform, hand sanitization, etc.)	0-5
2	Assessment of communication skills	0-10
3	Anamnesis collection skills (epidemiological, life, disease)	0-20
4	Conducting a physical examination of the patient	0-20
5	Skills to establish a preliminary diagnosis	0-15
6	Skills to prescribe the required laboratory and instrumental methods of diagnosis	0-15
7	Evaluation of the therapeutic approach	0-15
Total		60-100

### ASSESSMENT SCALE FOR THEORETICAL ASSIGNMENTS AND TESTS

(boundary, intermediate controls)

N <sup>o</sup>	Indicator	Point (%)
1	Question 1	0-100
2	Question 2	0-100
3	Question 3	0-100
4	Question 4	0-100
Total		Arithmetic mean (total score /4)

Each question on the examination card is assessed:

«85-100%»

- deep and lasting mastery of the topics or section's material;
- complete, consistent, literate and logically presented answers;
- demonstration of knowledge within the scope of the studied program and additional recommended literature;
- reproduction of educational material with the required degree of accuracy.

«75-84%»

- the presence of minor errors that are confidently corrected by the student after additional and leading questions;
- demonstration of knowledge within the scope of the studied program;
- clear presentation of educational material.

«60-74%»

- the presence of minor errors in the answer that are not corrected by the student;
- demonstration to students of incomplete knowledge of the completed program;
- unstructured, unclear presentation of educational material.

**«МНЕС 60%»**

- lack of knowledge of the topic or section material;
- makes serious mistakes in his answer.

**MCQ ASSESSMENT SCALE**

*(current control)*

1. One MCQ task contains 10 closed questions.
2. The tasks contain multiple choice answers, one of which is correct, and the rest are incorrect.
3. The student must remember in each task, only one correct answer must be selected.
4. For each correct answer the student receives 10 points.
5. The total score is determined as the sum of the points scored.
6. Mark (B %).

**REPORT WITH PRESENTATION ASSESSMENT SCALE**

*(current control)*

<b>№</b>	<b>Indicator</b>	<b>Point (%)</b>
<b>LOGIC</b>		10
1	Structuring the text into an introduction, hard core, and conclusion	0-5
2	Logical and clear conversion from one part to another, as well as within parts	0-5
<b>CONTENT</b>		50
1	Topic relevance	0-10
2	The presence of the main idea (thesis) in the introduction and the focus of the topic on the audience	0-10
3	Development of the theme (thesis) in the hard core (disclosure of the main provisions through a system of arguments supported by facts, examples, etc.)	0-15
4	The presence of conclusions that correspond to the topic and content of the hard core	0-15
<b>STRUCTURE</b>		25
1	Topic title	0-2
2	Slide design and use of effects (slide transitions, sound, graphics)	0-5
3	The presentation text is short and well written; the ideas are presented clearly and structured.	0-10
4	The slides are presented in a logical sequence.	0-5
5	The slides are printed in notes format.	0-3
<b>PRESENTATION</b>		15
1	Correctness and precision of speech during a presentation	0-5
2	Breadth of horizons (answers to questions)	0-5
3	Compliance with the speaking time regulations	0-5
<b>Total</b>		<b>60-100</b>

**MEDICAL HISTORY MASTERY ASSESSMENT SCALE**

*(current control)*

<b>№</b>	<b>Indicator</b>	<b>Point (%)</b>
1	General information about the patient	0-2
2	Complaints (a brief and clear list of all the patient's current complaints)	0-7
3	Anamnesis morbi	0-7
4	Anamnesis vitae	0-7
5	Epidemiological anamnesis	0-7
6	Status praesens objectivus	0-8
7	Preliminary diagnosis and its rationale	0-7
8	Laboratory and other additional methods of examining the patient	0-7
9	Final diagnosis and its rationale	0-10

10	Differential diagnosis	0-7
11	Etiology and pathogenesis of the diagnosed disease	0-8
12	Treatment	0-9
13	Two diaries in the dynamics of patient care	0-7
14	Epicrisis and prognosis	0-7
Total		60-100

*FINAL KNOWLEDGE ON THE DISCIPLINE ASSESSMENT SCALE*  
(final assessment of the discipline)

ORAL SURVEY ASSESSMENT SCALE

(intermediate control – «KNOWLEDGE»)

**When evaluating oral responses to KNOWLEDGE proficiency, the following criteria are considered:**

- 1) Knowledge of the main processes of the studied area, depth and completeness of disclosure of the issue.
- 2) Familiarity with terminology and its use in answers.
- 3) Ability to explain the essence of phenomena, events, and processes; to draw conclusions and generalizations; and to provide well-reasoned answers.
- 4) Mastery of the monological speech, logic and consistency of response, ability to answer questions, express one's own opinion on the discussed issue.

**A score (16-20 points)** is given to the answer, which demonstrates a solid knowledge of the following questions:

- etiology, pathogenesis, and preventive measures for the most common infectious diseases.
- the current classification of infectious diseases.
- clinical presentation, specific features, and possible complications of diseases in different age groups.
- the main principles of diagnosing infectious diseases.
- modern clinical, laboratory, and instrumental diagnostic methods.
- treatment methods and indications for their use.
- the fundamentals of organizing outpatient and primary healthcare services.
- indications for hospitalization in various infectious diseases.
- principles of patient follow-up (dispensary supervision).

The student demonstrated logical and well-structured answers.

**A score (10-15 points)** is given to the answer, which demonstrates a solid knowledge of the following questions:

- etiology, pathogenesis, and preventive measures for the most common infectious diseases.
- the current classification of infectious diseases.
- clinical presentation, specific features, and possible complications of diseases in different age groups.
- the main principles of diagnosing infectious diseases.
- modern clinical, laboratory, and instrumental diagnostic methods.
- treatment methods and indications for their use.
- the fundamentals of organizing outpatient and primary healthcare services.
- indications for hospitalization in various infectious diseases.
- principles of patient follow-up (dispensary supervision).

The student demonstrates a logical and consistent answer. However, there are one or two inaccuracies in the answer.

**A score (5-10 points)** is given to the answer, that indicates knowledge of the following questions:

- etiology, pathogenesis, and preventive measures for the most common infectious diseases.
- the current classification of infectious diseases.
- clinical presentation, specific features, and possible complications of diseases in different age groups.
- the main principles of diagnosing infectious diseases.
- modern clinical, laboratory, and instrumental diagnostic methods.
- treatment methods and indications for their use.
- the fundamentals of organizing outpatient and primary healthcare services.
- indications for hospitalization in various infectious diseases.
- principles of patient follow-up (dispensary supervision).

Several errors are allowed in the content of the answer.

**A score (1-4 points)** is given to an answer that reveals a lack of knowledge of theory on almost all topics, an inability to give reasoned answers, weak monologue speech, and a lack of logic and consistency. There are serious errors in the content of the answer.

*ASSESSMENT SCALE FOR MASTERY TASKS*  
(*intermediate control – «SKILLS» and EXPERTISE»*)

The following criteria are considered when evaluating responses to **SKILLS** and **EXPERTISE** (clinical task and interpretation of laboratory tests):

**A score (8-10 points)** is given, when student:

- demonstrates proficiency in medical terminology and the ability to analyze various medical facts.
- quickly identifies epidemiological data in an infectious patient.
- independently identifies the key clinical syndromes based on the patient's physical findings.
- interprets the results of studies (laboratory, x-ray, instrumental) and knows the physiological norm.
- accurately formulates a clinical diagnosis in accordance with the accepted classification.
- correctly selects additional laboratory and instrumental diagnostic methods.
- appropriately determines the treatment strategy.

All requirements of the assignment are fully met.

**A score (4-7 points)** is given, when student:

- can formulate the problem in their own words.
- does not have sufficient knowledge of medical terminology, the ability to analyze various medical facts.
- does not identify epidemiological data in an infectious disease case quickly enough.
- fails to identify all key clinical syndromes based on the patient's physical findings.
- shows weak interpretation of laboratory, radiological, and instrumental test results and provides an inadequate clinical diagnosis.
- does not fully correctly select additional laboratory and instrumental diagnostic methods.
- appropriately chooses the treatment strategy.

Most of the assignment requirements are met.

**A score (1-3 points)** is given, when student:

- is unable to formulate the problem in their own words and does not consider alternative solutions.
- has poor command of medical terminology and lacks the skills required to analyze medical facts.
- is slow in identifying epidemiological data in a case involving an infectious disease.
- does not adequately identify the key clinical syndromes based on physical findings.
- demonstrates very weak interpretation of laboratory, radiological, and instrumental test results and does not formulate a clinical diagnosis.
- does not correctly select additional laboratory and instrumental diagnostic methods.
- incorrectly determines the treatment strategy.

Many of the assignment requirements are not met.

**A score of (0 points)** is given when the student demonstrates a lack of understanding of the problem or provides no answer and makes no attempt to solve the task or interpret the laboratory findings.

**HEALTH MINISTRY OF THE KYRGYZ REPUBLIC**

**KYRGYZ-RUSSIAN SLAVIC UNIVERSITY**

**Department of Infectious Diseases named after Professor A.I. Romanenko**

**MEDICAL HISTORY**

**COMPLETED:** \_\_\_\_\_  
*(Full name of the student, group, year, faculty, semester)*

**CHECKED:** \_\_\_\_\_  
*(Full name of the teacher, position, academic degree)*

**BISHKEK 20\_\_**

**I. GENERAL INFORMATION (PASSPORT SECTION)**

**Full name** \_\_\_\_\_

**Age** \_\_\_\_\_  
*(date of birth (day, month, year for children under 6 years old))*

**Gender** \_\_\_\_\_

**Citizenship** \_\_\_\_\_

**Home address** \_\_\_\_\_  
\_\_\_\_\_

**Occupation, position (study)** \_\_\_\_\_  
\_\_\_\_\_

**Date and time of admission to hospital (hospitalization)** \_\_\_\_\_

**Date and time of discharge from hospital** \_\_\_\_\_

**Diagnosis:**

**on admission** \_\_\_\_\_  
\_\_\_\_\_

**clinic** \_\_\_\_\_  
\_\_\_\_\_

**Outcome of the disease** \_\_\_\_\_  
*(recovery/improvement/unchanged/worsening/death)*

**II. PATIENT'S COMPLAINTS UPON ADMISSION**

**COMPLAINTS:** \_\_\_\_\_

*(a clear listing of the patient's complaints before and during hospitalization)*

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**III. HISTORY OF THE PRESENT DISEASE (ANAMNESIS MORBI)**

1. \_\_\_\_\_

*(state of health before the current disease)*

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2. \_\_\_\_\_

*(reasons that caused the current disease)*

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3. \_\_\_\_\_

*(Time, conditions of appearance and first symptoms of the present disease,*

*chronologically sequential presentation of the appearance of new symptoms, the time of their appearance, strengthening/weakening /*

*disappearance; conditions under which the symptoms of the disease appeared and changed before the patient was admitted to hospital)*

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4. \_\_\_\_\_

*(the therapeutic measures that the patient used and the impact of these measures on the course of the disease)*

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#### **IV. EPIDEMIOLOGICAL ANAMNESIS (HISTORIA EPIDEMIOLOGICA)**

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*(describe possible contacts with infectious patients, the likelihood of infection at work/school,,*

---

*visiting other regions/countries and other probable sources of infection)*

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#### **V. ANAMNESIS VITAE**

1.

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*(ante- and early postnatal period – describe the number of pregnancy and birth the child was born from,*

---

*how the pregnancy proceeded, whether the child was born on time, what method of delivery was used, how the child was fed,*

---

*when he/she started walking and talking, a chronicle of the preschool and school periods)*

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2.

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*(labor activity, working conditions)*

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3.

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*(social and living conditions, marital status)*

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4.

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*(Family history and heredity - illnesses of the father and mother, close relatives, spouses, contacts, whether there are similar illnesses*

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*o the given or concomitant illnesses of the patient, whether there were any mental illnesses, malignant neoplasms,*

---

*metabolic diseases, etc. in the family.)*

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5.

*(vaccination history - whether vaccinated according to schedule, if not vaccinated - find out the reason)*

## VI. STATUS PRAESENS OBJECTIVUS

Temperature \_\_\_\_\_

Weight \_\_\_\_\_

Height \_\_\_\_\_

Patient's condition \_\_\_\_\_  
*(satisfactory/moderate/severe)*

*(what leading syndromes determine the severity of the condition: toxic/neurological/dehydration, etc.,*

*respiratory and cardiovascular disorders, dyspeptic and dysuric phenomena)*

Consciousness \_\_\_\_\_  
*(complete/confused (stupor)/indifferent (sopor)/unconscious (coma))*

Body constitution \_\_\_\_\_  
*(asthenic/normosthenic/hypersthenic)*

Patient's posture \_\_\_\_\_  
*(active, active-forced, passive)*

Nervous system \_\_\_\_\_  
*(psychoneurological state - adequate/excited/inhibited, neurological development is appropriate/not appropriate for age)*

*Meningeal symptoms – neck stiffness, Kernig's, Brudzinski's, Lesage's. Convulsions, their characteristics*

*Paresthesia, paralysis, paresis, reflexes (pupillary, pharyngeal, knee, Achilles).*

*Ocular symptoms – diplopia/nystagmus/exophthalmos/ptosis/accommodation disorder/gaze paresis/strabismus/miosis/mydriasis/anisocoria.*

*Dermographism – white/red, persistent/non-persistent. Taste, smell, hearing – impaired/not impaired.*

*Focal symptoms – yes/no, their characteristics*

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**Skin and mucous membranes**

*(skin and mucous membrane color. Skin tension and elasticity (turgor).*

*Humidity/sweating/scratching/rash, spider veins/butterfly veins/angiomas/scars/bedsores/subcutaneous hemorrhages/pigmentation*

**Hair**

*(hair type - male/female; hair loss)*

**Nails**

*(shape, fragility, striation, cyanosis), in the form of "watch glasses" shaped, "spoon-shaped", etc.)*

**Subcutaneous tissue**

*(Subcutaneous fat layer expression – normal/weak/excessive.*

*Places of greatest fat deposition. Weight loss. Cachexia. Edema, pastosity and their localization – extremities/face/eyelids/abdomen.*

**Lymph nodes**

*(localization of palpable lymph nodes, their size, shape,*

*consistency – hard/soft, painful/painless, adherence to surrounding tissue)*

**Muscles**

*(Development – normal/weak/atrophy. Tonus – normal/increased (rigidity)/decreased.*

*Muscle pain when palpated/moved. Muscle strength)*

**Bones**

*(Deformations, periostitis, curvatures, pain when tapping)*

**Joints**

*(Mobility – active/passive, range of motion, contractures, ankylosis.*

*Configuration changes – swelling/thickening/nodularity/curvature.*

*Pain when palpating, with passive and active movements, rust)*

**Respiratory system:**

**Nose**

*(external examination and palpation, smell from the nose, bleeding)*

**Larynx/pharynx**

*(pain, voice, examination of larynx/pharynx, hyperemia, hypertrophy of tonsils, presence/absence*

*plaques and their characteristics)*

**Chest shape**

*(deformation, asymmetry, curvature of the spine, prolapse of the supraclavicular, subclavian*

*and intercostal spaces)*

Breathing type \_\_\_\_\_  
*(Depth and rhythm of breathing, lag in breathing of one or another half of the chest.)*

\_\_\_\_\_  
*(Number of breaths per minute, dyspnea - inspiratory/expiratory/mixed)*

Hemoptysis \_\_\_\_\_  
*(No/Yes, sputum examination and description)*

Comparative percussion \_\_\_\_\_  
*(percussion sound - pulmonary/tympanic/shortening/dullness of pulmonary sound)*

Topographic percussion \_\_\_\_\_  
*(determination of pulmonary edge mobility)*

The tops of the lungs protrude above the collarbones in front \_\_\_\_\_ cm, back on level \_\_\_\_\_ vertebra.

Lower borders of the lungs:

<i>Percussion lines</i>	<i>Right lung</i>	<i>Left lung</i>
Linea parasternalis		—
Linea axillaris anterior		—
Linea axillaris media		
Linea axillaris posterior		
Linea scapularis		
Linea paravertebralis		

Auscultation of the lungs \_\_\_\_\_  
*(breathing pattern, wheezing - dry/wet, weakening of breathing, crepitation,*

\_\_\_\_\_  
*pleural friction rub)*

The circulatory system (cardiovascular system):

Bulging and pulsation around the heart ("heart hump") and large vessels \_\_\_\_\_  
*(yes/abs.)*

Palpation of the apex beat \_\_\_\_\_  
*(position, width (area), height and strength)*

Границы сердца:

Right \_\_\_\_\_  
*(indicate where the border of cardiac dullness was determined, in which intercostal space)*

Left \_\_\_\_\_  
*(indicate where the border of cardiac dullness was determined, in which intercostal space)*

Heart dimensions (diameter) \_\_\_\_\_ cm  
*(along the first and second perpendiculars)*

Width of the anterior projection of the aorta \_\_\_\_\_ cm  
*(along the second intercostal space)*

Heart sounds:

<i>Listening points</i>	<i>sound</i>	<i>Characteristics (clarity (loudness)/amplification/weakening (dullness), rhythm, tones (metallic, clapping, cannon), bifurcation/splitting/gallop tone, noises)</i>
Bicuspid valve	I sound	
	II sound	
Pulmonary artery	I sound	
	II sound	
Aorta	I sound	
	II sound	
Tricuspid valve	I sound	
	II sound	
Botkin's point	I sound	
	II sound	

Arteries and veins \_\_\_\_\_  
*(elasticity, pulsation, swelling, varicose veins)*

Pulse \_\_\_\_\_  
*(localization, rhythm, tension, filling)*

*Digestive organs (gastrointestinal tract)*

Oral odor \_\_\_\_\_  
*(normal/sour/putrid/fecal/ammonia/"baked apples"/alcohol etc.)*

Lips \_\_\_\_\_  
*(color, moisture, rashes, ulcerations of the corners of the mouth (cheilosis), cracks, deformities (harelip))*

Tongue \_\_\_\_\_  
*(color, dry/wet, coated/clean, "geographical", inflamed (glossitis),*

*«polished" - (atrophic "varnish"), cracks, ulcers, teeth marks)*

Oral mucosa \_\_\_\_\_  
*(color, pigmentation, ulceration, cracks, deformities - cleft palate)*

Teeth and gums \_\_\_\_\_  
*(absence of teeth, presence of dentures and caries. Color of gums, looseness, bleeding, ulceration)*

Abdomen \_\_\_\_\_  
*(shape, bloating /indentation, subcutaneous fat deposits, visible peristalsis, visible pulsation,*

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*dilation of the subcutaneous veins "caput medusa", flatulence, ascites, tension of the muscles of the anterior abdominal wall,*

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*navel, abdominal muscle separation, painful palpation, symptoms of peritoneal irritation)*

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*(auscultation - intestinal peristalsis, peritoneal noise)*

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Perianal area \_\_\_\_\_  
*(fissures, external hemorrhoids, rectal prolapse or not examined)*

Vomit and feces \_\_\_\_\_  
*(inspection and characterization of contents)*

Liver \_\_\_\_\_  
*(character of the anterior-inferior edge (sharp/rounded/soft/dense/uneven, painful)*

Liver sizes according to Kurlov:

Right midclavicular line \_\_\_\_\_ cm.

Middle line \_\_\_\_\_ cm.

Left costal margin \_\_\_\_\_ cm.

Gallbladder \_\_\_\_\_  
*(palpable/not palpable, shape, size, mobility, soreness, Courvoisier's symptom, Frenicus phenomenon)*

Spleen \_\_\_\_\_  
*(dimensions, when increasing - the length of the protruding part from the hypochondrium, pain, mobility during palpation)*

*Urogenital system*

Kidneys \_\_\_\_\_  
*(pain on palpation, mobility, Pasternatsky's symptom)*

Urine \_\_\_\_\_  
*(quantity, characteristics - color/transparency)*

## **VII. PRELIMINARY DIAGNOSIS**

---

*(formulation of a preliminary diagnosis in accordance with the classification and its justification considering complaints and anamnesis of*

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*the present disease, epidemiological data and objective examination (highlight the main syndromes, combination*

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*of which allows you to diagnose (suspect) this disease (infection))*

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**VIII. EXAMINATION PLAN**

*(list the volume of laboratory and instrumental methods that are necessary to confirm (exclude) your preliminary diagnosis)*

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**IX. MAIN DIAGNOSIS**

*(formulation of a diagnosis in accordance with the classification and justifying it considering the complaints of the anamnesis*

*of the current disease, data from the epidemiological anamnesis physical and laboratory findings, instrumental methods*

*(highlight the main syndromes, the combination of which allows justifying the diagnosis))*

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**XIV. DAILY RECORD \***

Date \_\_\_\_\_

Temperature \_\_\_\_\_

respiratory rate \_\_\_\_\_

Heart rate \_\_\_\_\_

BP \_\_\_\_\_

The patient's condition \_\_\_\_\_  
*(satisfactory, moderate, severe, due to what syndrome)*

\_\_\_\_\_  
*(complaints at the time of inspection)*

\_\_\_\_\_

\_\_\_\_\_

Consciousness \_\_\_\_\_  
*(complete, confused (stupor), indifferent (sopor), unconscious (coma))*

Neurological status \_\_\_\_\_  
*(by the same criteria as in Status praesens objectivus)*

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Patient's posture \_\_\_\_\_  
*(active, forced, passive)*

Skin and mucous membranes \_\_\_\_\_  
*(color of skin and visible mucous membranes. Skin tension and elasticity (turgor).*

\_\_\_\_\_

\_\_\_\_\_

Lymph nodes \_\_\_\_\_  
*(localization of palpable lymph nodes, their size, shape – oval/round/irregular,*

---

*consistency – hard/soft, painful/painless, adherence to surrounding tissue)*

---

Larynx/pharynx \_\_\_\_\_

*(pain, voice, hyperemia, hypertrophy of the tonsils, presence/absence of plaque and their characteristics)*

---

Breathing type \_\_\_\_\_

*(Depth and rhythm of breathing, lag in breathing of one or another half of the chest.*

*respiratory rate/min, dyspnea – inspiratory/expiratory/mixed)*

---

Comparative percussion \_\_\_\_\_

*(percussion sound - pulmonary/tympanic/shortening/dullness of pulmonary sound.*

---

Auscultation of the lungs \_\_\_\_\_

*(character of breathing, wheezing - dry/wet, weakening of breathing, crepitations, pleural noise)*

---

Heart sounds: \_\_\_\_\_

*(clarity (loudness)/gain/weakening (dullness), rhythm, tones (metallic, clapping,*

*cannon), splitting/splitting/gallop tone, noises)*

---

Pulse \_\_\_\_\_

*(localization, rhythm, tension, filling)*

---

Lips \_\_\_\_\_

*(color, moisture, rashes, ulcerations of the corners of the mouth (cheilosis), cracks, deformities (harelip)*

---

Tongue \_\_\_\_\_

*(color, dry/wet, coated/clean, "geographical", inflamed, "polished", cracks, ulcers, teeth marks)*

---

Oral mucosa \_\_\_\_\_

*(color, pigmentation, ulceration, cracks, deformities - cleft palate)*

---

Abdomen \_\_\_\_\_

*(shape, bloating/indentation, subcutaneous fat deposits, visible peristalsis, visible pulsation,*

*dilation of the subcutaneous veins (caput medusa) (flatulence, ascites, tension of the muscles of the anterior abdominal wall,*

*navel, divergence of the rectus abdominis muscles, painful palpation, symptoms of peritoneal irritation)*

---

*(auscultation - intestinal peristalsis, peritoneal noise)*

---

Liver \_\_\_\_\_

*(character of the anterior-inferior edge (sharp/rounded/soft/dense/uneven, painful)*

---

Liver sizes according to Kurlov:

on the right midclavicular line \_\_\_\_\_ cm.

on the midline \_\_\_\_\_ cm.

Along the left costal margin \_\_\_\_\_ cm.

Gallbladder \_\_\_\_\_  
*(palpable/not palpable, shape, size, mobility, soreness, Courvoisier's symptom, Frenicus phenomenon)*

Spleen \_\_\_\_\_  
*(size, when increasing - the length of the protruding part from the hypochondrium, pain, mobility during palpation)*

Kidneys \_\_\_\_\_  
*(size, shape, consistency, roughness, soreness, mobility, Pasternatsky's symptom)*

Urine \_\_\_\_\_  
*(quantity, characteristics)*

\_\_\_\_\_  
*(interpretation of current laboratory data and justification for treatment adjustments and patient management)*

\_\_\_\_\_

\_\_\_\_\_

**daily record - 2**

Date \_\_\_\_\_

Temperature \_\_\_\_\_

respiratory rate \_\_\_\_\_

Heart rate \_\_\_\_\_

BP \_\_\_\_\_

The patient's condition \_\_\_\_\_  
*(satisfactory, moderate, severe, due to what syndrome)*

\_\_\_\_\_  
*(complaints at the time of inspection)*

\_\_\_\_\_

\_\_\_\_\_

Consciousness \_\_\_\_\_  
*(complete, confused (stupor), indifferent (sopor), unconscious (coma))*

Neurological status \_\_\_\_\_  
*(by the same criteria as in Status praesens objectivus)*

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Patient's posture \_\_\_\_\_  
*(active, forced, passive)*

Skin and mucous membranes \_\_\_\_\_  
*(color of skin and visible mucous membranes. Skin tension and elasticity (turgor).*

\_\_\_\_\_  
*Humidity, sweating, scratching, rash, "spider veins"*

\_\_\_\_\_

Lymph nodes \_\_\_\_\_  
*(localization of palpable lymph nodes, their size, shape – oval/round/irregular,*

---

*consistency – hard/soft, painful/painless, adherence to surrounding tissue)*

---

Larynx/pharynx \_\_\_\_\_  
*(pain, voice, hyperemia, hypertrophy of the tonsils, presence/absence of plaque and their characteristics)*

---

Breathing type \_\_\_\_\_  
*(Depth and rhythm of breathing, lag in breathing of one or another half of the chest.*

---

*respiratory rate/min, dyspnea – inspiratory/expiratory/mixed)*

---

Comparative percussion \_\_\_\_\_  
*(percussion sound - pulmonary/tympanic/shortening/dullness of pulmonary sound.*

---

Auscultation of the lungs \_\_\_\_\_  
*(character of breathing, wheezing - dry/wet, weakening of breathing, crepitations, pleural noise)*

---

Heart sounds: \_\_\_\_\_  
*(clarity (loudness)/gain/weakening (dullness), rhythm, tones (metallic, clapping,*

---

*cannon), splitting/splitting/gallop tone, noises)*

---

Pulse \_\_\_\_\_  
*(localization, rhythm, tension, filling)*

---

Lips \_\_\_\_\_  
*(color, moisture, rashes, ulcerations of the corners of the mouth (cheilosis), cracks, deformities (harelip)*

---

Tongue \_\_\_\_\_  
*(color, dry/wet, coated/clean, "geographical", inflamed, "polished", cracks, ulcers, teeth marks)*

---

Oral mucosa \_\_\_\_\_  
*(color, pigmentation, ulceration, cracks, deformities - cleft palate)*

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Abdomen \_\_\_\_\_  
*(shape, bloating/indentation, subcutaneous fat deposits, visible peristalsis, visible pulsation,*

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*dilation of the subcutaneous veins (caput medusa) (flatulence, ascites, tension of the muscles of the anterior abdominal wall,*

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*(size, shape, consistency, roughness, soreness, mobility, Pasternatsky's symptom)*

Urine \_\_\_\_\_  
*(quantity, characteristics)*

\_\_\_\_\_  
*(interpretation of current laboratory data and justification for treatment adjustments and patient management)*

\_\_\_\_\_

\_\_\_\_\_

*\*(The diary in the educational medical history is written by the student in accordance with the class schedule. It reflects in detail the dynamics of complaints and the patient's condition between curations. At the end of each diary there should be a brief conclusion on the dynamics of the disease, if there are results of additional tests - their interpretation, if necessary - justification for changes in the treatment and management of the patient. The medical history should contain 2 diaries)*



**XVI. REFERENCES**

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