

**MINISTRY OF HEALTH OF UKRAINE**

**ODESSA NATIONAL MEDICAL UNIVERSITY**

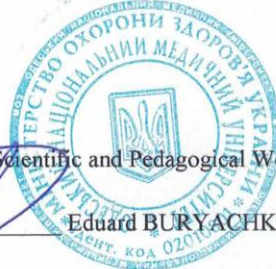
**Department of infectious diseases with a course of dermatovenereology**

**APPROVED**

**Vice-Rector for Scientific and Pedagogical Work**

**Eduard BURYACHKIVSKYI**

**September 1, 2025**



**WORK PROGRAM OF THE ACADEMIC DISCIPLINE  
INFECTIOUS DISEASES**

**APPROVED**

**Level of higher education:** second (master's)

**Field of knowledge:** 22 'Health Care'

**Speciality:** 222 'Medicine'

**Educational and professional programme:** Medicine

**2025**

The work programme is based on the educational and professional programme 'Medicine' for training specialists of the second (master's) level of higher education in the specialty 222 "Medicine" in the field of knowledge 22 'Health Care', approved by the Academic Council of ONMedU (Minutes No. 10 of 27 June 2024) and the educational and professional programme 'Medicine' for training specialists of the second (master's) level of higher education in the specialty I 2 "Medicine" in the field of knowledge I 'Health Care and Social Security', approved by the Academic Council of ONMedU (Minutes No. 10 of 26 June 2025).

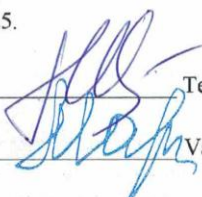
Developers:

Head of the Department of the department of infectious diseases with a course of dermatovenereology,  
Doctor of Medical Sciences, Professor, T.V. Chaban,  
Assistant N.V. Verba

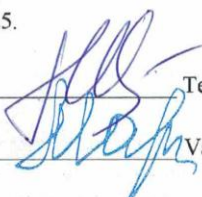
The work programme was approved at a meeting of the department of infectious diseases with a course of dermatovenereology.

Minutes No. 1 dated August 29, 2025.

Head of the department

 Tetiana CHABAN

Agreed with the EPP Guarantor

 Valeriia MARICHEREDA

Approved by the subject cycle methodical commission on therapeutic disciplines of ONMedU  
Minutes No. 1 dated 08/29/2025.

Chairman of the subject cycle methodical commission  
for therapeutic disciplines of ONMedU

 Olena VOLOSHYNA

Reviewed and approved at the meeting of the department

Minutes No. \_\_\_\_ dated " \_\_\_\_ " \_\_\_\_ 20\_\_

Head of Department

(signature) (Name SURNAME)

Reviewed and approved at the meeting of the department

Minutes No. \_\_\_\_ dated " \_\_\_\_ " \_\_\_\_ 20\_\_

Head of Department

(signature) (Name SURNAME)

### 1. Description of the academic discipline:

| Name of the indicators                                  | Field of knowledge, specialty, specialization, level of higher education | Characteristics of the academic discipline |
|---------------------------------------------------------|--------------------------------------------------------------------------|--------------------------------------------|
| The total number of:<br><br>Credits: 2<br><br>Hours: 60 | Field of knowledge<br>22 "Health care"                                   | <i>Full-time study</i>                     |
|                                                         |                                                                          | <i>Mandatory discipline</i>                |
|                                                         |                                                                          | <i>Year of training: 5</i>                 |
|                                                         | Specialty<br>222 "Medicine"                                              | <i>Semesters IX - X</i>                    |
|                                                         |                                                                          | <i>Lectures (6 hours)</i>                  |
|                                                         |                                                                          | <i>Seminars (0 hours)</i>                  |
|                                                         | Level of higher education<br>second (master's)                           | <i>Practical (34 hours)</i>                |
|                                                         |                                                                          | <i>Laboratory (0 hours)</i>                |
|                                                         |                                                                          | <i>Self- acquirer work (20 hours)</i>      |
|                                                         |                                                                          | <i>The form of final control is credit</i> |

### 2. The purpose and tasks of the educational discipline, competences, program learning outcomes.

**Purpose:** The mastery of knowledge of the discipline by the acquirer of higher education lays the foundations for the study of family medicine by acquirers, which involves the integration of teaching with this discipline and the formation of skills to apply knowledge of infectious diseases in the process of further education and professional activity

**Tasks:**

Formation of skills and abilities:

- identify the main clinical symptoms that form a characteristic syndrome in relation to the most common infectious diseases;
- establish a preliminary diagnosis of the most common infectious diseases (syndromal and etiological).

Improving skills:

- establishment and substantiation of the preliminary clinical diagnosis;
- planning of preventive and quarantine measures for the most common and particularly dangerous diseases;
- carry out clinical and laboratory differential diagnosis of various infectious diseases and infectious and non-infectious diseases;
- interpret the results of specific examination methods in the presence of combined pathology - infectious and non-infectious.

Mastering the skills:

- determine the tactics of managing patients with the most common infectious diseases;
- determine the tactics of hospitalization and isolation of infectious patients;
- diagnose emergency conditions and provide assistance at the pre-hospital stage;
- demonstrate awareness of infectious diseases as weapons of mass destruction;
- predict the consequences of infectious diseases for human health.

The process of studying the discipline is aimed at forming elements of the following competencies:

**General (GC):**

- GC1 – Ability to abstract thinking, analysis and synthesis.
- GC3 – Ability to apply knowledge in practical situations.
- GC4 – Knowledge and understanding of the subject area and understanding of professional activity.
- GC5 – Ability to adapt and act in a new situation.
- GC6 – Ability to make informed decisions.
- GC7 – Ability to work in a team.
- GC8 – Ability to interpersonal interaction.
- GC10. Ability to use information and communication technologies
- GC11 – Ability to search, process and analyze information from various sources.
- GC12 – Determination and persistence in relation to assigned tasks and assumed responsibilities.
- GC14. The ability to realize one's rights and responsibilities as a member of society, to be aware of the values of a public (free democratic) society and the need for its sustainable development, the rule of law, the rights and freedoms of a person and a citizen in Ukraine
- GC15. The ability to preserve and increase moral, cultural, scientific values and achievements of society based on understanding the history and patterns of development of the subject area, its place in the general system of knowledge about nature and society and in the development of society, technology and technologies, to use various types and forms of motor activity for active recreation and leading a healthy lifestyle
- GC16. Ability to assess and ensure the quality of work performed
- GC17. The desire to preserve the environment

**Special (SC):**

- SC1 – Ability to collect medical information about the patient and analyze clinical data.
- SC2 – Ability to determine the necessary list of laboratory and instrumental studies and evaluate their results.
- SC3 – Ability to establish a preliminary and clinical diagnosis of the disease.
- SC4 – The ability to determine the necessary regime of work and rest in the treatment and prevention of diseases
- SC5 – Ability to determine the nature of nutrition in the treatment and prevention of diseases.
- SC6 – Ability to determine the principles and nature of treatment and prevention of diseases.
- SC7 – Ability to diagnose emergency conditions.
- SC8 – Ability to determine tactics and provide emergency medical assistance.
- SC10 – Ability to perform medical manipulations.
- SC11 - Ability to solve medical problems in new or unfamiliar environments with incomplete or limited information, taking into account aspects of social and ethical responsibility, including the early intervention system
- SC13 – Ability to carry out sanitary and hygienic and preventive measures.
- SC14 – Ability to plan and carry out preventive and anti-epidemic measures for infectious diseases
- SC15 – The ability to conduct an examination of working capacity
- SC16 – Ability to maintain medical documentation, including electronic forms. SK17. The ability to assess the impact of the environment, socio-economic and biological determinants on the state of health of an individual, family, population SK20. The ability to conduct epidemiological and medical statistical studies of the health of the population; processing of

social, economic and medical information

SC23 – Ability to develop and implement scientific and applied projects in the field of health care.

SC24 – Compliance with ethical principles when working with patients and laboratory animals.

SC25 – Adherence to professional and academic integrity, to be responsible for the reliability of the obtained scientific results

SC26 – The ability to determine the management tactics of persons subject to dispensary supervision.

### **Program learning outcomes (PLO):**

PLO1 - Have thorough knowledge of the structure of professional activity. To be able to carry out professional activities that require updating and integration of knowledge. To be responsible for professional development, the ability for further professional training with a high level of autonomy.

PLO2 - Understanding and knowledge of fundamental and clinical biomedical sciences, at a level sufficient for solving professional tasks in the field of health care.

PLO3 - Specialized conceptual knowledge, including scientific achievements in the field of health care and are the basis for conducting research, critical comprehension of problems in the field of medicine and related interdisciplinary problems, including an early intervention system

PLO4 - Identify and identify leading clinical symptoms and syndromes (according to list 1); according to standard methods, using preliminary data of the patient's history, data of the patient's examination, knowledge about the person, his organs and systems, establish a preliminary clinical diagnosis of the disease (according to list 2).

PLO5 - Collect complaints, life anamnesis and diseases, assess the psychomotor and physical development of the patient, the state of organs and systems of the body, based on the results of laboratory and instrumental studies, evaluate information about the diagnosis (according to list 4), taking into account the age of the patient.

PLO6 - To establish a final clinical diagnosis by making a reasoned decision and analyzing the received subjective and objective data of clinical, additional examination, carrying out differential diagnosis, observing the relevant ethical and legal norms, under the control of the managing physician in the conditions of a health care institution ( according to list 2).

PLO7 - Prescribe and analyze additional (mandatory and optional) examination methods (laboratory, functional and/or instrumental) (according to list 4) of patients with diseases of organs and body systems for differential diagnosis of diseases (according to list 2).

PLO8 - Determine the main clinical syndrome or symptom that determines the severity of the victim's/victim's condition (according to list 3) by making a reasoned decision about the person's condition under any circumstances (in the conditions of a health care facility, outside its boundaries), including in conditions of emergency and hostilities, in field conditions, in conditions of lack of information and limited time.

PLO9 - Determine the nature and principles of treatment (conservative, operative) of patients with diseases (according to list 2), taking into account the age of the patient, in the conditions of a health care institution, outside its borders and at the stages of medical evacuation, including in field conditions, on the basis of a preliminary clinical diagnosis, observing the relevant ethical and legal norms, by making a reasoned decision according to existing algorithms and standard schemes, in case of the need to expand the standard scheme, be able to justify personalized recommendations under the control of the head physician in the conditions of a medical

institution.

PLO10 - Determine the necessary mode of work, rest and nutrition on the basis of the final clinical diagnosis, observing the relevant ethical and legal norms, by making a reasoned decision according to existing algorithms and standard schemes.

PLO14 - Determine tactics and provide emergency medical care in emergency situations (according to list 3) in limited time conditions according to existing clinical protocols and standards of treatment.

PLO16. Form rational medical routes for patients; organize interaction with colleagues in their own and other institutions, organizations and institutions; to apply tools for the promotion of medical services in the market, based on the analysis of the needs of the population, in the conditions of the functioning of the health care institution, its division, in a competitive environment.

PLO17. Perform medical manipulations (according to list 5) in the conditions of a medical institution, at home or at work based on a previous clinical diagnosis and/or indicators of the patient's condition by making a reasoned decision, observing the relevant ethical and legal norms.

PLO18. To determine the state of functioning and limitations of a person's vital activities and the duration of incapacity for work with the preparation of relevant documents, in the conditions of a health care institution, based on data about the disease and its course, peculiarities of a person's professional activity, etc. Maintain medical documentation regarding the patient and the contingent of the population on the basis of regulatory documents.

PLO19. Plan and implement a system of anti-epidemic and preventive measures regarding the occurrence and spread of diseases among the population.

PLO20. Analyze the epidemiological situation and carry out measures for mass and individual, general and local prevention of infectious diseases.

PLO21. Search for the necessary information in the professional literature and databases of other sources, analyze, evaluate and apply this information.

PLO24. To organize the necessary level of individual safety (own and the persons he cares for) in case of typical dangerous situations in the individual field of activity.

PLO29. Plan, organize and carry out measures for the specific prevention of infectious diseases, including in accordance with the National calendar of preventive vaccinations, both mandatory and recommended. Manage vaccine residues, organize additional vaccination campaigns, including immunoprophylaxis measures.

PLO30. Determine the management tactics of persons subject to dispensary supervision (children, pregnant women, workers whose professions require mandatory dispensary examination).

PLO31. To determine the management tactics of persons suffering from chronic infectious diseases subject to dispensary supervision.

**As a result of studying the academic discipline, the acquirer of higher education must:**

**Know:** etiology, epidemiology, pathogenesis, clinic, diagnosis, differential diagnosis, treatment, prevention of common infectious diseases.

**Be able:**

- communicate with the patient, collect complaints, life and disease history, epidemiological history, conduct a survey of organs and systems;
- conducting a physical examination of the patient and determining the main symptoms of the

disease;

- analyze the results of laboratory, functional and instrumental research.
- carry out differential diagnosis and substantiate the clinical diagnosis.
- determine tactics and provide emergency medical aid in emergency situations
- determine the nature and principles of treatment on the basis of a preliminary clinical diagnosis, observing relevant ethical and legal norms, by making a reasoned decision according to existing algorithms and standard schemes.
- determination of primary and secondary prevention measures.
- to maintain medical documentation for common infectious diseases;
- report on the results of the examination of the patient by a team of acquirers in the study group, analysis under the guidance of the teacher of the correctness of the diagnosis, differential diagnosis, scope of the prescribed examination, treatment tactics, assessment of the prognosis and work capacity.

### **3. CONTENTS OF THE COURSE "INFECTIOUS DISEASES"**

#### **Topic 1. The concept of the infectious process. General characteristics of infectious diseases with fecal-oral transmission mechanism.**

The place of the discipline "Infectious diseases" in the system of medical knowledge. The main stages of the development of infectology as a science. Classification of infectious diseases. The role of immunity and non-specific protective factors in the infectious process. Methods of examination of an infectious patient. Peculiarities of clinical and laboratory diagnostics of infectious diseases, interpretation of the results of specific research methods. Principles of treatment of infectious diseases. Preventive measures and principles of immunoprophylaxis of infectious diseases. The structure and regime of the infectious hospital. Procedure for hospitalization, examination and discharge of patients. Peculiarities of maintaining medical documentation.

Place of infectious diseases with fecal-oral transmission mechanism in the structure of infectious diseases. Epidemiological, pathogenetic and clinical features of intestinal infectious diseases. Modern methods of laboratory diagnostics. Indications for hospitalization and rules for discharge of patients from an infectious hospital.

#### **Topic 2. Typhoid fever, paratyphoids A and B**

Typhoid fever, paratyphoids A and B: etiology, epidemiology, pathogenesis, clinical manifestations, laboratory diagnostics, differential diagnostics, complications, prognosis. The modern methods of treatment, medical care for patients in the prehospital stage. The indications for hospitalization and rules of discharge of patients from an infectious hospital. The principles of prevention.

#### **Topic 3. The syndrome of diarrhea in clinics of infectious diseases. Cholera.**

The syndrome of diarrhea: etiology, epidemiology, classification in accordance with type of interaction micro- and macroorganism, clinical manifestations, laboratory diagnostics.

Cholera: etiology, epidemiology, pathogenesis, clinical manifestations, laboratory diagnostics, differential diagnostics, complications. Tactics of medical workers in case of a sick person diagnosed with cholera. The modern methods of treatment, medical assistance for the

patient on the pre-hospital stage. The indications for hospitalization and of discharge of patients from an infectious hospital. Prevention and immunoprophylaxis.

Dehydrative shock: definition; pathogenesis; clinical and laboratory diagnosis of water-electrolyte disorders at different degrees of dehydration. Differential diagnosis of dehydration shock with shock states of other genesis. The principles of treatment, emergency care for patients in the prehospital stage.

Rotaviral infection: etiology, epidemiology, pathogenesis, clinical manifestations, laboratory diagnostics, differential diagnostics, complications, prognosis. The principles of treatment, medical care for patients on pre-hospital stage. The indications for hospitalization, rules for discharge of patients from an infectious hospital. The principles of prevention.

#### **Topic 4. Salmonellos. Shygelloses. Amebiasis.**

Salmonellos: etiology, epidemiology, pathogenesis, clinical manifestations, laboratory diagnostics, differential diagnostics, complications, prognosis. The principles of treatment, medical care for patients on pre-hospital stage. The indications for hospitalization, rules for discharge of patients from an infectious hospital. The principles of prevention.

Shygelloses: etiology, epidemiology, pathogenesis, clinical manifestations, laboratory diagnostics, differential diagnostics, complications, prognosis. The principles of treatment, medical care for patients on pre-hospital stage. The indications for hospitalization, rules for discharge of patients from an infectious hospital. The principles of prevention.

Amebiasis: etiology, epidemiology, pathogenesis, clinical manifestations, laboratory diagnostics, differential diagnostics, complications, prognosis. The principles of treatment, medical care for patients on pre-hospital stage. The indications for hospitalization, rules for discharge of patients from an infectious hospital. The principles of prevention.

#### **Тема 5. Botulism. Toxic food-borne infections.**

Botulism: etiology, epidemiology, pathogenesis, clinical manifestations, laboratory diagnostics, differential diagnostics, complications, prognosis. The principles of treatment, medical care for patients on pre-hospital stage. The indications for hospitalization, rules for discharge of patients from an infectious hospital. The principles of prevention.

Toxic food-borne infections: etiology, epidemiology, pathogenesis, clinical manifestations, laboratory diagnostics, differential diagnostics, complications, prognosis. The principles of treatment, medical care for patients on pre-hospital stage. The indications for hospitalization, rules for discharge of patients from an infectious hospital. The principles of prevention.

#### **Topic 6. General characteristics of respiratory tract infections. Influenza.**

The place of infectious diseases with an airborne mechanism of transmission in the structure of infectious pathology. Epidemiological, pathogenetic and clinical features of infectious diseases of the respiratory tract. Procedure for hospitalization, examination and discharge of patients. Peculiarities of maintaining medical documentation.

Influenza: etiology, epidemiology, pathogenesis, clinical course, laboratory diagnosis, differential diagnosis, complications, prognosis. Modern methods of treating patients. Principles of immunoprophylaxis. Evaluation of specific and non-specific preventive measures. Indications for hospitalization, rules for discharge of patients from an infectious hospital. Medical assistance to patients at the pre-hospital stage.

The role of animal and bird influenza viruses in human pathology.



### **Topic 7. Other ARVI: parainfluenza, adenovirus disease, RS infection, rhinovirus infection, reovirus infection**

Definition of the concepts of "ARD" and "ARVI". Etiology of ARVI. The place of ARVI in the structure of infectious pathology.

Differential diagnosis of ARVI. Principles of laboratory diagnosis, treatment and prevention of ARVI. Indications for hospitalization, rules for discharge of patients from an infectious hospital. Medical assistance to patients at the pre-hospital stage.

Parainfluenza: etiology, epidemiology, pathogenesis, classification, clinical course, diagnosis, complications.

False croup: definition of the concept; pathogenesis; stages; clinical and laboratory diagnostics; principles of treatment, emergency care for patients at the pre-hospital stage.

Adenovirus disease: epidemiology, pathogenesis, classification, clinical course, diagnosis, complications.

RS infection: etiology, epidemiology, pathogenesis, classification, clinical course, diagnosis, complications.

Rhinovirus infection: etiology, epidemiology, pathogenesis, clinic, complications.

Reovirus infection: etiology, epidemiology, pathogenesis, clinic, complications.

### **Topic 8. Corona virus infection (SARS, MERS, COVID-19)**

Corona virus infections: etiology, epidemiology, pathogenesis, clinical manifestations, laboratory diagnosis, differential diagnosis, suspected, probable and confirmed case, complications, prognosis. Indications for hospitalization, rules for discharge of patients from an infectious hospital. Modern methods of treating patients. Prevention.

Enterovirus diseases: etiology, epidemiology, classification, pathogenesis, clinical course, laboratory diagnosis, differential diagnosis, complications. Principles of treatment, medical assistance to patients at the pre-hospital stage. Indications for hospitalization, rules for discharge of patients from an infectious hospital. Principles of prevention.

Poliomyelitis: etiology, epidemiology, pathogenesis, clinical manifestations, laboratory diagnosis, suspected, probable and confirmed case, differential diagnosis, complications. Principles of treatment. Anti-epidemic measures in the cell. Principles of immunoprophylaxis.

### **Topic 9. Meningeal syndrome in the clinic of infectious diseases. Meningococcal infection**

Pathogenesis of meningeal syndrome. Definition of the terms "meningism" and "meningitis". Etiology, pathogenesis, classification of meningitis. Clinical and laboratory diagnostics. Differential diagnosis of serous and purulent meningitis of various etiologies. Principles of treatment and prevention.

Meningococcal infection: place in the structure of infectious pathology of Ukraine. Etiology, features of the epidemic process, pathogenesis, classification, clinical and laboratory diagnosis of various forms of meningococcal infection, differential diagnosis, complications, prognosis. Principles of treatment of various clinical forms. Indications for hospitalization and rules for discharge of patients from an infectious hospital. Emergency care for patients at the pre-hospital stage. Preventive measures.

Infectious-toxic shock: definition of the concept; modern views on the pathogenesis; classification; clinical and laboratory diagnostics; principles of treatment; emergency care for patients in the prehospital stage.

Swelling and edema of the brain: definition; modern views on the pathogenesis; classification; clinical diagnosis; principles of treatment; emergency care for patients in the prehospital stage.

### **Topic 10. Diphtheria**

Diphtheria: relevance for Ukraine. Etiology, features of the epidemic process, pathogenesis, classification, clinical course, laboratory diagnosis, differential diagnosis, complications, prognosis. Principles of treatment and prevention (including immunoprophylaxis). Medical assistance to patients at the pre-hospital stage. Indications for hospitalization and rules for discharge from an infectious hospital. Medical examination of convalescents.

True croup: definition, pathogenesis, stages, clinical and laboratory diagnosis, principles of treatment, emergency care for patients at the prehospital stage.

Anaphylactic shock: pathogenesis, classification, clinical manifestations, differential diagnosis. Emergency aid.

Serum sickness: pathogenesis, clinical course, differential diagnosis. Principles of treatment and prevention

### **Topic 11. General characteristics of viral hepatitis. Viral hepatitis with fecal-oral transmission mechanism**

General characteristics of viral hepatitis.

Acute viral hepatitis A: etiology, epidemiology, classification, pathogenesis, clinical course, complications, laboratory diagnosis of acute viral hepatitis (specific and biochemical markers), prognosis. Indications for hospitalization, rules for discharge of patients from an infectious hospital. Principles of immunoprophylaxis.

Acute viral hepatitis E: etiology, epidemiology, classification, pathogenesis, clinical course, complications, laboratory diagnosis of acute viral hepatitis (specific and biochemical markers), prognosis. Peculiarities of the course in pregnant women. Indications for hospitalization, rules for discharge of patients from an infectious hospital. Principles of prevention. Differential diagnosis of viral hepatitis. Treatment tactics.

### **Topic 12. Acute viral hepatitis with a parenteral transmission mechanism**

Acute HB: etiology, epidemiology, classification, pathogenesis, clinical course, complications, laboratory diagnosis of acute viral hepatitis (specific and biochemical markers), prognosis. Indications for hospitalization, rules for discharge of patients from an infectious hospital. Preventive measures. Immunoprophylaxis.

Acute HD: etiology, epidemiology, classification, pathogenesis, clinical course, complications, laboratory diagnosis of acute viral hepatitis (specific and biochemical markers), prognosis. The concept of cat and super-infection, pathogenetic and clinical features. Indications for hospitalization, rules for discharge of patients from an infectious hospital. Preventive measures.

Viral hepatitis C: etiology, epidemiology, classification, pathogenesis, clinical course, laboratory diagnosis of acute viral hepatitis (specific and biochemical markers), differential diagnosis, prognosis. Principles of treatment and prevention. Indications for hospitalization.

Concept of fulminant viral hepatitis. Acute hepatic encephalopathy: pathogenesis, clinical and laboratory diagnosis, principles of treatment, emergency care for patients at the prehospital stage.

### **Topic 13. HIV infection. Organization of palliative care in the context of HIV infection**

Relevance for Ukraine. Etiology, epidemiology, pathogenesis, classification, clinical course, clinical diagnosis of the acute phase of HIV infection, differential diagnosis, prognosis.

Laboratory diagnostics, patient examination plan when a preliminary diagnosis of HIV infection is established. Principles of prescribing antiretroviral therapy. Preventive measures. Normative documents of the Ministry of Health of Ukraine, which regulate the procedure for voluntary testing, hospitalization, treatment of patients, preventive measures, as well as legal aspects regarding HIV infection. Dispensary examination of patients with HIV infection. The concept of the inflammatory syndrome of immune recovery. Organization of palliative care in the context of HIV infection. Peculiarities of managing patients in the terminal stage of the disease, counseling, care, psychological, spiritual and social support of the patient and his relatives.

The most common AIDS-associated infectious diseases: herpesvirus, protozoan (cerebral toxoplasmosis, cryptosporidiosis, isosporosis), mycoses (candidiasis, pneumocystis pneumonia, cryptococcosis), bacterial etiology (bacterial recurrent pneumonia, listeriosis, mycobacteriosis, salmonellosis recurrent septicemia, other disseminated bacterial infections) . Clinical and laboratory diagnosis of OI. Peculiarities of the course of opportunistic infections in patients with HIV/AIDS. Principles of treatment and prevention. Indications for hospitalization.

#### **Topic 14. Organization of palliative care in the context of HIV infection.**

Organization of palliative care in the context of HIV infection. Peculiarities of managing patients in the terminal stage of the disease, counseling, care, psychological, spiritual and social support of the patient and his relatives.

#### **Topic 15. Infectious diseases with predominant damage to the kidneys: leptospirosis.**

Leptospirosis: etiology, epidemiology, classification, pathogenesis, clinical course, laboratory diagnosis, differential diagnosis, complications, prognosis. Principles of treatment, medical assistance to patients at the pre-hospital stage, treatment tactics in case of emergency conditions. Procedure for hospitalization, rules for discharge of patients from the hospital. Preventive measures.

#### **Topic 16. Infectious diseases with predominant damage to the kidneys: Hemorrhagic Fever with Renal Syndrome. Congo-Crimea hemorrhagic fever**

Hemorrhagic Fever with Renal Syndrome: etiology, epidemiology, classification, pathogenesis, clinical course, laboratory diagnosis, differential diagnosis, complications, prognosis. Principles of treatment, medical assistance to patients at the pre-hospital stage, treatment tactics in case of emergency conditions. Hospitalization procedure, rules of hospital discharge. Preventive measures.

Congo-Crimea fever: etiology, epidemiology, classification, pathogenesis, clinical course, laboratory diagnosis, differential diagnosis, complications, prognosis. Principles of treatment and prevention. Medical assistance to patients at the pre-hospital stage, treatment tactics in case of emergency conditions. Procedure for hospitalization, rules for discharge of patients from the hospital.

Acute Renal Failure: pathogenesis, classification, clinical and laboratory diagnosis. Principles of treatment, emergency care for patients at the pre-hospital stage.

#### **Topic 17. Rabies. Tetanus**

Epidemiology, classification, pathogenesis, clinical course, diagnosis, differential diagnosis, prognosis. Principles of treatment, medical assistance to patients at the pre-hospital stage, treatment tactics in case of emergency conditions. Procedure for hospitalization, rules for

discharge of patients from the hospital. Principles of prevention

### **Topic 18. General characteristics of infectious diseases with a transmissible transmission mechanism. Malaria**

The place of infectious diseases with a transmissible transmission mechanism in the structure of infectious pathology. Epidemiological, pathogenetic and clinical features of infectious diseases with a transmissible transmission mechanism. The procedure for examination, hospitalization, and discharge of patients from an infectious hospital. Peculiarities of maintaining medical documentation.

Malaria: etiology, epidemiology, classification, pathogenesis, clinical course, laboratory diagnosis, differential diagnosis, complications, prognosis. Modern methods of treatment, medical assistance to patients at the pre-hospital stage, treatment tactics in case of emergency conditions. Indications for examination, hospitalization, rules for discharge of patients from an infectious hospital. Prevention of malaria.

Normative documents of the Ministry of Health of Ukraine, which regulate the procedure for laboratory examination for malaria, hospitalization, treatment of patients, implementation of preventive measures.

### **Topic 19. Typhus and Brill's disease**

Etiology, epidemiology, classification, pathogenesis, clinical course, laboratory diagnosis, differential diagnosis, complications, prognosis. Principles of treatment. Indications for hospitalization, rules for discharge from an infectious hospital. Preventive measures.

## **4. The structure of the academic discipline**

| Topics                                                                                                                                                                | Hours |           |                     |                      |                       |     |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|-----------|---------------------|----------------------|-----------------------|-----|
|                                                                                                                                                                       | Total | including |                     |                      |                       |     |
|                                                                                                                                                                       |       | Lectures  | Seminars<br>classes | Practical<br>classes | Laboratory<br>classes | SSW |
| Topic 1. Introduction to the course of infectology. General characteristics of infectious diseases with fecal-oral transmission mechanism. Typhoid. Paratypes A and B | 6     | 2         | 0                   | 2                    | 0                     | 2   |
| Topic 2. Typhoid fever. Paratypes A and B                                                                                                                             | 2     | 0         |                     | 2                    |                       | 0   |
| Topic 3. Diarrhea syndrome in the clinic of infectious diseases. Cholera                                                                                              | 4     | 0         | 0                   | 2                    | 0                     | 2   |
| Topic 4. Salmonellosis. Dysentery. Amoebiasis                                                                                                                         | 4     | 0         | 0                   | 2                    | 0                     | 2   |
| Topic 5. Botulism. Food toxic infections                                                                                                                              | 2     | 0         | 0                   | 2                    | 0                     | 0   |
| Topic 6. General characteristics of infectious diseases with an airborne transmission mechanism. Influenza.                                                           | 4     | 2         | 0                   | 2                    | 0                     | 0   |
| Topic 7. Other ARVI: parainfluenza, adenovirus disease, RS infection, rhinovirus infection, reovirus infection                                                        | 2     | 0         | 0                   | 0                    | 0                     | 2   |

|                                                                                                                                                                          |    |   |   |    |   |    |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|---|---|----|---|----|
| Topic 8. Coronavirus infection (SARS, MERS, COVID-19)<br>Enteroviral diseases (diseases caused by Coxsackie viruses, ECHO and unclassified enteroviruses; poliomyelitis) | 2  | 0 | 0 | 2  | 0 | 0  |
| Topic 9. Meningeal syndrome in the clinic of infectious diseases. Meningococcal infection                                                                                | 4  | 0 | 0 | 2  | 0 | 2  |
| Topic 10. Diphtheria                                                                                                                                                     | 2  | 0 | 0 | 2  | 0 | 0  |
| Topic 11. General characteristics of viral hepatitis. Viral hepatitis with fecal-oral transmission mechanism.                                                            | 4  | 2 | 0 | 2  | 0 | 0  |
| Topic 12. Acute viral hepatitis with a parenteral transmission mechanism                                                                                                 | 4  | 0 | 0 | 2  | 0 | 2  |
| Topic 13. HIV infection.                                                                                                                                                 | 4  | 0 | 0 | 2  | 0 | 2  |
| Topic 14. Organization of palliative care in the context of HIV infection                                                                                                | 2  | 0 | 0 | 0  | 0 | 2  |
| Topic 15. Infectious diseases with primary damage to the kidneys: leptospirosis                                                                                          | 4  | 0 | 0 | 2  | 0 | 2  |
| Topic 16. Infectious diseases with primary damage to the kidneys: Hemorrhagic Fever with Renal Syndrome. Congo-Crimea hemorrhagic fever                                  | 2  | 0 | 0 | 2  | 0 | 0  |
| Topic 17. Rabies. Tetanus                                                                                                                                                | 2  | 0 | 0 | 2  | 0 | 0  |
| Topic 18. General characteristics of infectious diseases with a transmissible transmission mechanism. Malaria                                                            | 4  | 0 | 0 | 2  | 0 | 2  |
| Topic 19. Typhus and Brill's disease.                                                                                                                                    | 2  | 0 | 0 | 2  | 0 | 0  |
| At all                                                                                                                                                                   | 60 | 6 | 0 | 34 | 0 | 20 |

## 5. Topics of lectures/seminars/practical/laboratory classes

### 5.1. Topics of lectures

| №     | Topics                                                                                                                      | Hours |
|-------|-----------------------------------------------------------------------------------------------------------------------------|-------|
| 1     | Lecture 1. Introduction to the course of infectious diseases. The concept of the infectious process and infectious diseases | 2     |
| 2     | Lecture 2. General characteristics of infectious diseases with an airborne transmission mechanism. Flu. Other ARVI          | 2     |
| 3     | Lecture 3. Viral hepatitis                                                                                                  | 2     |
| TOTAL |                                                                                                                             | 6     |

### 5.2. Topics of seminar classes

Seminar classes are not provided

### 5.3. Topics of practical classes

| №  | Topics                                                                                                           | Hours |
|----|------------------------------------------------------------------------------------------------------------------|-------|
| 1. | Topic 1. Practical lesson 1.<br>Introduction to the course of infectology. General characteristics of infectious | 2     |

|                    |                                                                                                                                                                                                  |   |
|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|
|                    | diseases with fecal-oral transmission mechanism.                                                                                                                                                 |   |
| 2.                 | Topic 2. Practical lesson 2.<br>Typhoid. Paratypes A and B                                                                                                                                       | 2 |
| 3.                 | Topic 3. Practical lesson 3.<br>Diarrheal syndrome in the clinic of infectious diseases. Cholera                                                                                                 | 2 |
| 4.                 | Topic 4. Practical lesson 4.<br>Salmonellosis. Dysentery. Amoebiasis                                                                                                                             | 2 |
| 5.                 | Topic 5. Practical lesson 5<br>Botulism. Food toxic infections                                                                                                                                   | 2 |
| 6.                 | Topic 6. Practical lesson 6.<br>General characteristics of infectious diseases with an airborne transmission mechanism. Influenza.                                                               | 2 |
| 7.                 | Topic 8. Practical lesson 7.<br>Corona virus infection (SARS, MERS, COVID-19)<br>Enteroviral diseases (diseases caused by Coxsackie viruses, ECHO and unclassified enteroviruses; poliomyelitis) | 2 |
| 8.                 | Topic 9. Practical lesson 8.<br>Meningeal syndrome in the clinic of infectious diseases. Meningococcal infection                                                                                 | 2 |
| 9.                 | Topic 10. Practical lesson 9.<br>Diphtheria                                                                                                                                                      | 2 |
| 10.                | Topic 11. Practical lesson 10.<br>General characteristics of viral hepatitis. Viral hepatitis with fecal-oral transmission mechanism.                                                            | 2 |
| 11.                | Topic 12. Practical lesson 11.<br>Acute viral hepatitis with a parenteral transmission mechanism                                                                                                 | 2 |
| 12.                | Topic 13. Practical lesson 12.<br>HIV infection. AIDS-associated infections and invasions.                                                                                                       | 2 |
| 13.                | Topic 15 Practical lesson 13.<br>Infectious diseases with primary damage to the kidneys: leptospirosis                                                                                           | 2 |
| 14.                | Topic 16 Practical lesson 14.<br>Infectious diseases with primary damage to the kidneys: hemorrhagic fever with rena syndrome, Congo-Crimea hemorrhagic fever                                    | 2 |
| 15.                | Topic 17. Practical lesson 15.<br>Rabies. Tetanus                                                                                                                                                | 2 |
| 16.                | Topic 18. Practical lesson 16.<br>General characteristics of infectious diseases with a transmissible transmission mechanism. Malaria.                                                           | 2 |
| 17.                | Topic 19. Practical lesson 17.<br>Typhus and Brill's disease.                                                                                                                                    | 2 |
| <i>TOTAL</i><br>34 |                                                                                                                                                                                                  |   |

#### 5.4. Topics of laboratory classes

Laboratory classes are not provided

#### 6. SELF-STUDY WORK OF HIGHER EDUCATION ACQUIRER

| №  | Topic                                       | Hours |
|----|---------------------------------------------|-------|
| 1. | Topic 1. Preparation for thematic lesson 1  | 2     |
| 2. | Topic 2. Preparation for practical lesson 3 | 2     |

|              |                                               |           |
|--------------|-----------------------------------------------|-----------|
| 3.           | Topic 3. Preparation for thematic lesson 4    | 2         |
| 4.           | Topic 4. Preparation for thematic lesson 7    | 2         |
| 5.           | Topic 5. Preparation for practical lesson 8   | 2         |
| 6.           | Topic 6 Preparation for thematic lesson 11    | 2         |
| 7.           | Topic 7 Preparation for thematic lesson 12    | 2         |
| 8.           | Topic 8. Preparation for practical lesson 13  | 2         |
| 9.           | Topic 9. Preparation for practical lesson 14  | 2         |
| 10.          | Topic 10. Preparation for practical lesson 16 | 2         |
| <b>TOTAL</b> |                                               | <b>20</b> |

### INDIVIDUAL WORK OF THE ACQUIRERS

| <b>№</b> | <b>topic</b>                                                                                                                                                                                                                                                                                                                                                                                       |
|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1        | <ul style="list-style-type: none"> <li>Report of the abstract in the practical classes</li> </ul> Topics for reports <ol style="list-style-type: none"> <li>1. Diseases with primary damage of the digestive system of viral etiology (rotaviral infection, traveler's diarrhea)</li> <li>2. Diseases with primary damage of the digestive system of protozoan etiology (balantidiasis)</li> </ol> |
|          | <ul style="list-style-type: none"> <li>Report of the abstract in the practical classes</li> </ul> Topics for reports <ol style="list-style-type: none"> <li>1. Differential diagnosis of exanthemas.</li> </ol>                                                                                                                                                                                    |
|          | <ul style="list-style-type: none"> <li>Report of the abstract in the practical classes</li> </ul> Topics for reports <ol style="list-style-type: none"> <li>1. Viral hepatitis G, SEN, TTV.</li> </ol>                                                                                                                                                                                             |
|          | <ul style="list-style-type: none"> <li>Report of the abstract</li> </ul> Topics for the report: <ol style="list-style-type: none"> <li>1. Filariosis</li> <li>2. Rickettsioses (endemic typhus, Marseille fever, Rocky Mountain spotted fever, relapsing typhus, Q fever)</li> </ol>                                                                                                               |

## 7. Forms and methods of teaching

### *Forms of teaching:*

The discipline is taught in the form of practical classes; organizing independent work of the student.

### *Methods of teaching:*

**Lectures:** address the problematic issues of the relevant sections of infectious diseases. The lecture course maximally utilizes didactic tools (multimedia presentations, slides, educational films, demonstration of thematic patients). The lecture and practical stages of students' education are structured mainly so that lectures precede the corresponding practical classes.

### *Practical classes:*

- 1) verbal methods: instructional storytelling, discussions, educational discourse (these allow clarifying key issues of the practical/clinical session topic and integrating the theoretical breakdown process with student questioning), briefings, working with methodological developments, methodological manuals, textbooks;
- 2) visual methods: demonstrating multimedia materials using an LCD screen on the topics

of the clinical session, as well as working at the patient's bedside (analyzing clinical cases during department visits or using an electronic database);

3) practical methods: exercises (solving situational clinical tasks with diagnosis formulation, justification, and responses to questions; practical work at the patient's bedside with clinical analysis and open discussion)

*Independent work:* independent study with recommended primary and additional literature, electronic information resources, and self-mastering communication algorithms with the patient. Tasks for independent work in the form of questions from the list of topics for independent study are included in the oral interview and written work (during the clinical session).

### 8. Forms of control and criteria for assessing learning outcomes

**Forms of ongoing control:** oral questioning, testing, assessment of practical skills performance, evaluation of communication skills during role-playing, solving situational clinical problems, assessment of activity in class.

**Form of final control:** credit

#### Current evaluation criteria in practical training

| Grade              | Evaluation criteria                                                                                                                                                                                                                                                                                                                                                                   |
|--------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Excellent «5»      | The acquirer has a fluent command of the material, takes an active part in discussing and solving a situational clinical problem, confidently demonstrates practical skills during the examination of a patient and the interpretation of clinical, laboratory and instrumental research data, expresses his opinion on the topic of the lesson, demonstrates clinical thinking.      |
| Good «4»           | The acquirer has a good command of the material, participates in the discussion and solution of a situational clinical problem, demonstrates practical skills during the examination of a patient and the interpretation of clinical, laboratory and instrumental research data with some errors, expresses his opinion on the subject of the lesson, demonstrates clinical thinking. |
| Satisfactory «3»   | The acquirer does not have sufficient knowledge of the material, is unsure of participating in the discussion and solving of the situational clinical problem, demonstrates practical skills during the examination of the patient and the interpretation of clinical, laboratory and instrumental research data with significant errors.                                             |
| Unsatisfactory «2» | The acquirer does not possess the material, does not participate in the discussion and solution of the situational clinical problem, does not demonstrate practical skills during the examination of the patient and the interpretation of clinical, laboratory and instrumental research data.                                                                                       |

The credit is awarded to the student who has completed all tasks of the educational program, actively participated in practical classes, completed and defended an individual task, has an average current grade of no less than 3.0, and has no academic debts. The credit is conducted: in the last class before the start of the exam session - under the credit system of education, in the last class - under the cyclical system of education. The grade for the credit is the arithmetic mean of all components according to the traditional four-point scale and is rounded using a statistical method to two decimal places.



### 9. Distribution of points received by acquirers of higher education

The grades from the subject for students who have successfully completed the program are converted into a traditional four-point scale based on the absolute criteria listed in the table:

**Table of conversion of traditional grade into a multi-point scale**

| <b>National assessment<br/>for discipline</b> | <b>The sum of points<br/>for the discipline</b> |
|-----------------------------------------------|-------------------------------------------------|
| Excellent («5»)                               | 185-200                                         |
| Good («4»)                                    | 151-184                                         |
| Satisfactory («3»)                            | 120-150                                         |
| Unsatisfactory («2»)                          | Lower then 120                                  |

The multi-point scale (200-point scale) characterizes the actual success of each student in mastering the educational discipline. The conversion of the traditional grade to the 200-point scale is carried out by the information and technical department of the University using the program 'Contingent' according to the appropriate formula: Average success score (current success in the discipline) x 40.

The ECTS grading scale assesses the achievements of students in the educational discipline who study in the same course of the same specialty according to the scores they have received, through ranking, namely:

| ECTS mark | Statistic index       |
|-----------|-----------------------|
| “A”       | Next 10% of acquirers |
| “B”       | Next 25% of acquirers |
| “C”       | Next 30% of acquirers |
| “D”       | Next 25% of acquirers |
| “E”       | Next 10% of acquirers |

The ECTS grading scale establishes the student's ranking among the best or the worst within the reference group of peers (faculty, specialty), meaning their rating. When converting from a multi-point scale, the boundaries of grades 'A', 'B', 'C', 'D', 'E' do not usually correspond with the boundaries of grades '5', '4', '3' on the traditional scale. The grade 'A' on the ECTS scale cannot equal the grade 'excellent', and the grade 'B' cannot equal the grade 'good', and so forth. Students who receive the grades 'FX' and 'F' ('2') are not included in the ranked list of students. Such students automatically receive a grade 'E' after retaking the exam. The grade 'FX' is awarded to students who have scored the minimum points for current academic activity, but who have not passed the final assessment. The grade 'F' is awarded to students who have attended all classroom sessions for the course but have not achieved an average score (3.00) for current academic activity and are not allowed to take the final assessment.

### 10. Methodological support

- Working program of the academic discipline
- Syllabus
- Methodical developments for lecture classes
- Methodical developments for practical classes

- Methodical recommendations for independent work of acquirers of higher education
- Multimedia presentations
- Illustrative materials
- Situational clinical tasks
- Situational results of laboratory examinations
- Scenarios of role-playing games (if necessary)
- Presentations and lecture notes
- Examination tickets
- Electronic bank of test tasks KROK-2

### **11. Questions to the final control**

1. Introduction to the course of infectology. General characteristics of infectious diseases with a fecal-oral mechanism of transmission.
2. Typhoid fever. Etiology. Epidemiology. Pathogenesis. Clinic. Diagnostics. Treatment. Prevention.
3. Paratyphoid A and B. Etiology. Epidemiology. Pathogenesis. Clinic. Diagnostics. Treatment. Prevention.
4. Diarrheal syndrome in the clinic of infectious diseases.
5. Cholera. Etiology. Epidemiology. Pathogenesis. Clinic. Diagnostics. Treatment. Prevention.
6. Salmonellosis. Etiology. Epidemiology. Pathogenesis. Clinic. Diagnostics. Treatment. Prevention.
7. Dysentery. Etiology. Epidemiology. Pathogenesis. Clinic. Diagnostics. Treatment. Prevention.
8. Amebiasis. Etiology. Epidemiology. Pathogenesis. Clinic. Diagnostics. Treatment. Prevention.
9. Botulism. Etiology. Epidemiology. Pathogenesis. Clinic. Diagnostics. Treatment. Prevention.
10. Foodborne toxic infections. Etiology. Epidemiology. Pathogenesis. Clinic. Diagnostics. Treatment. Prevention.
11. General characteristics of infectious diseases with airborne transmission mechanism. Influenza. Etiology. Epidemiology. Pathogenesis. Clinic. Diagnostics. Treatment. Prevention.
12. Other acute respiratory viral infections: parainfluenza, adenovirus disease, RS-infection, rhinovirus infection, reovirus infection. Etiology. Epidemiology. Pathogenesis. Clinic. Diagnostics. Treatment. Prevention.
13. Coronavirus infection (SARS, MERS, COVID-19). Enterovirus diseases (diseases caused by Coxsackievirus, ECHO and unclassified enteroviruses; poliomyelitis). Etiology. Epidemiology. Pathogenesis. Clinic. Diagnostics. Treatment. Prevention.
14. Meningeal syndrome in the clinic of infectious diseases.
15. Meningococcal infection. Etiology. Epidemiology. Pathogenesis. Clinic. Diagnostics. Treatment. Prevention.
16. Diphtheria. Etiology. Epidemiology. Pathogenesis. Clinic. Diagnostics. Treatment. Prevention.
17. General characteristics of viral hepatitis.
18. Viral hepatitis with fecal-oral transmission mechanism. Etiology. Epidemiology. Pathogenesis. Clinic. Diagnostics. Treatment. Prevention.
19. Acute viral hepatitis with parenteral transmission mechanism. Etiology. Epidemiology. Pathogenesis. Clinic. Diagnostics. Treatment. Prevention.
20. HIV-infection. AIDS-associated infections and infestations. Etiology. Epidemiology. Pathogenesis. Clinic. Diagnostics. Treatment. Prevention.

21. Organization of palliative care in the context of HIV-infection. Etiology. Epidemiology. Pathogenesis. Clinic. Diagnostics. Treatment. Prevention.
22. Infectious diseases with predominant kidney damage: leptospirosis. Etiology. Epidemiology. Pathogenesis. Clinic. Diagnostics. Treatment. Prevention.
23. Hemorrhagic fever with renal syndrome. Congo-Crimea haemorrhagic fever. Etiology. Epidemiology. Pathogenesis. Clinic. Diagnostics. Treatment. Prevention.
24. Tetanus. Etiology. Epidemiology. Pathogenesis. Clinic. Diagnostics. Treatment. Prevention.
25. Erysipelas. Etiology. Epidemiology. Pathogenesis. Clinic. Diagnostics. Treatment. Prevention.
26. General characteristics of infectious diseases with a transmissible mechanism of transmission. Malaria. Etiology. Epidemiology. Pathogenesis. Clinic. Diagnostics. Treatment. Prevention.
27. Typhus and Block's disease. Etiology. Epidemiology. Pathogenesis. Clinic. Diagnostics. Treatment. Prevention.

## **12. Recommended literature**

### **Main literature**

1. Infectious Diseases: textbook (IV a. l.) / O.A. Holubovska, M.A. Andreichyn, A.V. Shkurba, T.V. Chaban et al. К. ВCB «Медицина», 2018. (APPROVED by the Ministry of Education and Science of Ukraine as a textbook for acquirers of higher medical educational establishments; APPROVED by the Ministry of Health of Ukraine as a textbook for acquirers of higher medical educational establishments) – 664 с. + 12 с. кольор. вкл. ; двокольор. вид. ISBN 978-617-505-727-8.
2. Pediatric Infectious Diseases: textbook / S.O. Kramarov, O.B. Nadraga, L.V. Pyra et al.; edited by S.O. Kramarov, O.B. Nadraga. — 4th edition. — Kyiv: AUS Medicine Publishing, 2020. — 240 p.
3. Infectious diseases: textbook / O.A. Golubovska, M.A. Andreychyn, A.V. Shkurba etc.; under the editorship O.A. Golubovska - 4th ed., revised. and added - К.: VSV "Medicine", 2022. - 464 p. (colored)/

### **Additional**

1. Infectious diseases. Course of lectures: study guide / E.V. Nikitin, K.L.Servetskyi, T.V. Chaban [and others]. – Odesa: ONMedU, 2012. – 252 p. – (Series"medical library")
2. Comprehensive Textbook of Infectious Disease: M. I. Sahadulla, S. A. Udman. – 2nd edition. Jaypee Brothers, Medical Publishers Pvt. Limited, 2019 – 835 p.
3. Атлас дитячих інфекційних хвороб. Червона Книга = Red Book® Atlas of Pediatric Infectious Diseases: пер. 3-го англ. вид. : двомов. вид. / Керол Дж. Бейкер ; наук. ред. пер. проф. С.О. Крамарьов ; пер. з англ. Л.В. Закордонець. — К. : ВCB «Медицина», 2019. — 744 с. Tropical infections: manual/ed. MA Andreychyn, VD Moskaliuk. - Lviv: "Magnolia 2006", 2019. - 220 p.
4. Tropical infections: manual/ed. MA Andreychyn, VD Moskaliuk. - Lviv: "Magnolia 2006", 2019. - 220 p.
5. General epidemiology: study guide (IV a. l.) / N.O. Vynograd. — 3rd edition, corrected К: ВCB «Медицина», 2017. – 128 с.

6. Hagberg H., Wennerholm U.B., Savman K. // Current Opinion in Infection Disease». – 2015. - Vol. - № 3. - P. 301-306.
7. Harrison's Principles of internal medicine. 19th edition /edited by Anthony S. Fauci, Dennis L Kasper, Dan L. Longo [et all]. – New York. - 2017. – 1307 p.
8. CDC Yellow Book Travelers Health – 2020 ([www.cdc.gov/yellowbook](http://www.cdc.gov/yellowbook))

### 13. Електронні інформаційні ресурси

<http://moz.gov.ua> – Міністерство охорони здоров'я України  
[www.ama-assn.org](http://www.ama-assn.org) – Американська медична асоціація / American Medical Association  
[www.who.int](http://www.who.int) – Всесвітня організація охорони здоров'я  
[www.dec.gov.ua/mtd/home/](http://www.dec.gov.ua/mtd/home/) - Державний експертний центр МОЗ України  
<http://bma.org.uk> – Британська медична асоціація  
[www.gmc-uk.org](http://www.gmc-uk.org) - General Medical Council (GMC)  
[www.bundesaerztekammer.de](http://www.bundesaerztekammer.de) – Німецька медична асоціація  
<https://library.odmu.edu.ua/catalog/> Електронний каталог бібліотеки ОНМедУ