

MINISTRY OF HEALTH OF UKRAINE
ODESSA NATIONAL MEDICAL UNIVERSITY
Department of Infectious Diseases

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«APPROVED»

Vice-rector
for scientific and pedagogical work,
Eduard BURIACHKIVSKYI
01.09.2024



WORK PROGRAM OF
«Infectious diseases»

Level of higher education: the second (Master's)
Field of knowledge: 22 "Health care"
Specialty: 222 "Medicine"
Educational and professional program: Medicine

The Work Program (WP) is based on the educational-professional program (EPP) "Medicine" for the second degree (Master's) level of professional training in the specialty 222 Medicine, the field of knowledge 22 Health Care, approved by the Academic Council of ONMedU (Minutes No 10, dated June 27, 2024).

Developer:

Head of the Department, MD, professor Chaban T.V.

The work program was approved at the meeting of the Department of Infectious Diseases

Minutes No. 1 dated " 29 " 08 2024.

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 " 30 " 08 2024.

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. The Course Description:

Indicators	Field of knowledge, Specialty, Level of higher education	Features of the academic discipline
Total amount:	22 Health care	<i>Full-time studies</i>
ECTS Credits: 2		<i>Compulsory discipline</i>
Hours: 60	222 Medicine	<i>Year of training: 6</i>
Content modules: 7	The second (Master's)	<i>Semesters XI - XII</i>
		<i>Lectures (0 h.)</i>
		<i>Seminars (0 h.)</i>
		<i>Practical sessions (40 h.)</i>
		<i>Labs (0 h.)</i>
		<i>Self-study (20 h.)</i>
		<i>Individual tasks (0 h.)</i>
		<i>Form of final control is exam</i>

2. Purpose and objectives of the course, competencies, program learning outcomes.

Purpose: The mastery of this discipline by a higher education acquirer lays the foundations for the study of family medicine, which involves the integration of its teaching and the development of skills to apply knowledge of infectious diseases in the process of further education and professional activities.

Objectives:

Development 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 (syndromes and aetiology).

Abilities improvement:

- establish clinical and laboratory differential diagnosis of various infectious diseases and differentiate them from non-infectious ones;
- interpret the results of specific examination techniques in a combined pathology - infectious and non-infectious;
- planning of preventive and quarantine measures for the most common and highly dangerous diseases;

Skills mastering:

- determine the tactics of managing patients with the most common infectious diseases, their hospitalization and isolation;
- diagnose emergency conditions and provide the first aid at the pre-hospital stage;
- demonstrate awareness of infectious diseases as weapons of mass destruction;
- predict the consequences of infectious diseases for human health;
- demonstrate the ability to manage infectious hospital medical documentation.

The process of the discipline study is aimed at forming components 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 take reasonable 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 analyse information from various sources.

GC12 – Determination and persistence in relation to assigned tasks and assumed responsibilities.

GC14. Ability to realize one's rights and responsibilities as a member of society, to be aware of the values of 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. 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. Desire to preserve the environment.

Special (SC):

SC1 – Ability to collect the patient's medical information and analyse 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 a disease.

SC4 – 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 care.

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, hygienic and preventive measures.

SC14 – Ability to plan and carry out preventive and anti-epidemic measures for infectious diseases.

SC15 – Ability to conduct an examination of working capacity.

SC16 – Ability to fill medical documentation, including electronic forms.

SC17 – Ability to assess the impact of the environment, socio-economic and biological determinants on the state of health of an individual, family, population.

SC20 – 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 – Adherence to ethical principles when working with patients and laboratory animals.

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

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

Program learning outcomes (PLO):

PLO1 – Having a thorough knowledge of the structure of professional activity. Being 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 basic 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 - Identifying leading clinical symptoms and syndromes (according to the 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 the list 2).

PLO5 - Collecting complaints, history of life and diseases, assessing 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, evaluation of the information regarding the diagnosis (according to the list 4), considering the age of a patient.

PLO6 - Establishing the final clinical diagnosis by making a reasoned decision and analysing 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 the health care institution (according to the list 2).

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

PLO8 - Determination of the main clinical syndrome or symptom that determines the severity of the victim's/victim's condition (according to the 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 borders), including in conditions of emergency and hostilities, in field conditions, in conditions of lack of information and limited time.

PLO9 - Determination of the nature and principles of treatment (conservative, operative) of patients with diseases (according to the list 2), taking into account the patient's age, in the conditions of a health care institution, outside its borders and at the stages of medical evacuation, including in field conditions, based on 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 - Determination of the necessary mode of work, rest and nutrition based on the final clinical diagnosis, observing the relevant ethical and legal norms, by taking a reasoned decision according to existing algorithms and standard schemes.

PLO14 - Determination of tactics and providing emergency medical care in emergencies (according to the list 3) in limited time conditions according to existing clinical protocols and standards of treatment.

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

PLO17. Performing medical manipulations (according to the list 5) in the conditions of a medical institution, at home or 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. Determination of 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. Management of medical documentation regarding the patient and the contingent of the population based on regulatory documents.

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

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

PLO21. Searching for the necessary information in the professional literature and databases of other sources, analysing, evaluating and applying the obtained information.

PLO24. Organization of the necessary level of individual safety (own and the persons taken care of) in case of typical dangerous situations in the individual field of activity.

PLO29. Planning, organising and carrying out measures for the specific prevention of infectious diseases, including by the National calendar of preventive vaccinations, both mandatory and recommended. Managing vaccine residues, and organization of additional vaccination campaigns, including immune-prophylaxis measures.

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

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

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

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

Be able to:

- communicate with a patient, collect complaints, life and disease history, epidemiological history, conduct an inquiry by organs and systems;
- conducting the patient's physical examination and determining the main symptoms of a disease;
- analyse the results of laboratory, functional and instrumental tests;
- carry out a differential diagnosis and substantiate the clinical one;
- determine tactics and provide an urgent medical aid in emergency situations;
- determine the nature and principles of treatment on the basis of a preliminary clinical diagnosis;
- determine primary and secondary prevention measures;
- report on the results of a patient's examination, substantiation of a diagnosis established and a differentiated one, scope of the prescribed examination, treatment tactics, assessment of the prognosis and work capacity.

3. CONTENTS OF THE COURSE

Content module 1.

General characteristics of zoonotic infections.

Topic 1. General characteristics of zoonotic infections.

General characteristics of zoonotic infections. Zoonoses: etiology, epidemiology, classification.

Topic 2. Plague. Anthrax.

Etiology, epidemiology, classification, pathogenesis, clinical course, diagnosis, differential diagnosis, complications, prognosis. Principles of treatment. Procedure for hospitalization, rules for

discharge of patients from the hospital. Preventive measures.

Topic 3. Brucellosis. Tularemia.

Etiology, epidemiology, classification, pathogenesis, clinical course, laboratory diagnosis, differential diagnosis, complications, prognosis, treatment, medical tactics in case of emergency conditions. Procedure for hospitalization, rules for discharge of patients from the hospital. Preventive measures.

Topic 4. Rabies.

Etiology, epidemiology, classification, pathogenesis, clinical course, laboratory diagnosis, differential diagnosis, complications, prognosis, treatment, medical tactics in case of emergency conditions. Procedure for hospitalization, rules for discharge of patients from the hospital. Preventive measures.

Topic 5. Especially dangerous diseases. The concept of biosafety. Hemorrhagic fevers: Ebola, Lassa, Marburg

Marburg, Ebola, Lassa fevers: etiology, epidemiology, classification, pathogenesis, clinical course, laboratory diagnosis, differential diagnosis, complications, prognosis. Principles of treatment and prevention. Treatment tactics in case of emergency conditions. Procedure for hospitalization, rules for discharge of patients from the hospital.

Topic 6. Natural and monkey pox.

Natural and monkey pox. Historical data. Topicality. Etiology, epidemiology, classification, pathogenesis, clinical course, laboratory diagnosis, differential diagnosis, complications, prognosis. Principles of treatment and prevention. Victory over smallpox as an example of effective and successfully organized immunoprophylaxis.

Content module 2.

Differential diagnosis of diseases with syndrome of diarrhea.

Topic 7. Differential diagnosis of diseases with diarrhea syndrome.

Acute infectious diseases with syndrome of diarrhea: salmonellosis, shigellosis, food borne infections, botulism. Examination of the patient at the pre-hospital stage. Indications for sending the patient to the hospital. Primary anti-epidemic measures in the center of infection.

Topic 8. Differential diagnosis of diseases with syndrome of diarrhea: escherichiosis, campylobacteriosis, cholera, yersiniosis, viral diarrhea, parasitic invasions of the intestines.

Topic 9. General characteristics of helminthiases. Intestinal protozoal invasions: giardiasis, balantidiasis..

Etiology, epidemiology, classification, pathogenesis, clinical course, laboratory diagnosis, differential diagnosis, complications, prognosis, treatment, medical tactics in case of emergency conditions. Procedure for hospitalization, rules for discharge of patients from the hospital. Preventive measures.

Topic 10. Intestinal yersiniosis. Pseudotuberculosis

Etiology, epidemiology, classification, pathogenesis, clinical course, laboratory diagnosis, differential diagnosis, complications, prognosis, treatment, medical tactics in case of emergency conditions. Procedure for hospitalization, rules for discharge of patients from the hospital. Preventive measures.

Content module 3.

Differential diagnosis of diseases with syndrome of jaundice

Topic 11. Differential diagnosis of diseases with syndrome of jaundice.

Clinical and pathophysiological characteristics of jaundice: hemolytic, hepatic, mechanical. Clinical and laboratory syndromes: cytolytic, cholestasis, mesenchymal-inflammatory.

Topic 12. Differential diagnosis of diseases with syndrome of jaundice.

Laboratory diagnosis of jaundice. Methods of express diagnostics. Biochemical investigations.

Markers of viral hepatitis. Indications for sending the patient to the hospital. Primary anti-epidemic measures. Acute hepatic encephalopathy. Causes, clinic, diagnosis, emergency care

Content module 4.

Differential diagnosis of infectious diseases with an air-drop mechanism of transmission

Topic 13. Differential diagnosis of infectious diseases with respiratory syndrome

Epidemiological and clinical features of influenza and SARS. Methods of express diagnostics, treatment and prevention. Acute respiratory failure. Causes, clinical signs, emergency care

Topic 14. Differential diagnosis of angina

Infectious diseases with damage of the oropharynx (diphtheria, bacterial tonsillitis, infectious mononucleosis, scarlet fever, herpetic angina, tularemia). Semiotics of lesions of the oropharynx (hyperemia, cyanosis, edema, films and their localization, pain when swallowing, regional lymphadenopathies). Severity of the syndrome of intoxication and respiratory failure.

Topic 15. Infectious mononucleosis.

Etiology, epidemiology, classification, pathogenesis, clinical course, laboratory diagnosis, differential diagnosis, complications, prognosis, treatment, medical tactics in case of emergency conditions. Procedure for hospitalization, rules for discharge of patients from the hospital. Preventive measures.

Topic 16. Differential diagnosis of infectious diseases with meningeal syndrome

Meningeal syndrome in infectious (meningococcal meningitis, viral serous meningitis, etc.) and non-infectious diseases (subarachnoid hemorrhage, traumatic brain injury). Medical assistance. Emergency aid.

Topic 17. Differential diagnosis of infectious diseases with meningeal syndrome

Primary and secondary meningitis. Serous and purulent meningitis. Features of clinical manifestations. Methods of laboratory diagnostics. Complication. Treatment and prevention.

Edema-swelling syndrome of the brain. Causes, clinical signs, emergency care.

Topic 18. Tick-borne and Japanese encephalitis.

Etiology, epidemiology, classification, pathogenesis, clinical course, laboratory diagnosis, differential diagnosis, complications, prognosis, treatment, medical tactics in case of emergency conditions. Procedure for hospitalization, rules for discharge of patients from the hospital. Preventive measures.

Content module 5.

Differential diagnosis of exanthema

Topic 19. Differential diagnosis of exanthems

Characteristics of exanthema (spot, roseola, erythema, hemorrhage, papule, tubercle, nodule, blister, bubble, vesicle, pustule), morphology, term of manifestation and dynamics. Acute infectious diseases with manifestations of exanthema: typhoid and typhoid, paratyphoid, meningococcemia, hemorrhagic fevers, dysentery. Clinical-epidemiological and laboratory diagnostics. Differential diagnosis of infectious and non-infectious exanthems (skin diseases, medicinal disease, skin manifestations in collagenoses, hemorrhagic diatheses).

"Children's" air-drop infections in adults. Vaccination schedule. Clinical course of measles, rubella, chicken pox, epidemic parotitis in adults. Rubella in pregnant women. Peculiarities of complications of "children's" droplet infections. Organization of treatment of adults at home (pathogenetic and symptomatic therapy, need to prescribe antibiotics).

Topic 20. Lyme borreliosis. Erysipelas.

Etiology, epidemiology, classification, pathogenesis, clinical course, laboratory diagnosis, differential diagnosis, complications, prognosis, treatment, medical tactics in case of emergency conditions. Procedure for hospitalization, rules for discharge of patients from the hospital. Preventive measures.

Content module 6.

Differential diagnosis of lymphadenopathies

Topic 21. Differential diagnosis of lymphadenopathy.

AIDS, plague, tularemia, brucellosis, toxoplasmosis, rubella, infectious mononucleosis and others.

Topic 22. HIV infection/AIDS

Historical data. Etiology. Epidemiology. Classification. 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.

AIDS-associated infections. Clinical and epidemiological data for suspected HIV infection Diagnosis at different stages of HIV infection: clinical, epidemiological, laboratory data. Treatment. Principles of prescribing HAART. Prevention

Content module 7.

Differential diagnosis of diseases with syndrome of prolonged fever

Topic 23. Differential diagnosis of diseases with syndrome of prolonged fever

Main clinical manifestations of infectious diseases with persistent fever (typhoid, paratyphoid, typhus and other rickettsioses, brucellosis, hemorrhagic fevers, leptospirosis, yersiniosis, sepsis and others). Principles of differential diagnosis, laboratory diagnostics. Differential diagnosis in tuberculosis and non-infectious diseases with persistent fever.

Topic 24. Malaria

Causative agents of malaria in human. Life cycle of parasites. Features of immunity. Pathogenesis of disease onset, anemia, malarial coma, hemoglobinuria. Pathogenesis of early relapses and late outcome. Features of the clinical course in different forms of malaria. Malaria complications: cerebral malaria, acute hemolysis, hemoglobinuria (blackwater fever), acute kidney injury.

Treatment and prevention of malaria. The main antimalarial medications, their mechanism of action. Treatment of malarial coma and other complications. Therapy of malaria caused by chemo-resistant forms of pathogens.

4. Structure of the course

Назви тем	Hours				
	Total	including			
		Lectures	Seminars	Practical Classes	Self-study
Content module 1.					
The general characteristics of zoonotic infections					
Topic 1. The general characteristics of zoonotic infections.	2	0	0	2	0
Topic 2. Plague. Anthrax.	2	0	0	2	0
Topic 3. Brucellosis. Tularemia.	2			2	0
Topic 4. Rabies.	2			2	0
Topic 5. Especially dangerous diseases. The concept of biosafety. Hemorrhagic fevers: Ebola, Lassa, Marburg	2			2	0
Topic 6. Natural and monkey pox.	2			2	0

<i>Total in content module 1</i>	12	0	0	12	0
Content module 2.					
The differential diagnosis of the diseases with syndrome of diarrhea					
Topic 7. The differential diagnosis of the diseases with syndrome of diarrhea: salmonellosis, shigellosis, food-borne infections, botulism.	4	0	0	2	2
Topic 8. The differential diagnosis of the diseases with syndrome of diarrhea: escherichiosis, campylobacteriosis, cholera, yersiniosis, viral diarrhea, parasitic invasions of the intestines.	2	0	0	2	0
Topic 9. General characteristics of helminthiasis. Intestinal protozoal invasions: giardiasis, balantidiasis.	2	0	0	0	2
Topic 10. Intestinal yersiniosis. Pseudotuberculosis	2	0	0	0	2
<i>Total in content module 2</i>	10	0	0	4	6
Content module 3.					
The differential diagnosis of the diseases with syndrome of jaundice					
Topic 11. Differential diagnosis of diseases with syndrome of jaundice. Clinical and pathophysiological characteristics of jaundice: hemolytic, hepatic, mechanical. Clinical and laboratory syndromes: cytolysis, cholestasis, mesenchymal-inflammatory.	4	0	0	2	2
Topic 12. Differential diagnosis of diseases with syndrome of jaundice. Laboratory diagnosis of jaundice. Methods of express diagnostics. Biochemical investigations. Markers of viral hepatitis. Indications for sending the patient to the hospital. Primary anti-epidemic measures. Acute hepatic encephalopathy. Causes, clinic, diagnosis, emergency care	2	0	0	2	0
<i>Total in content module 3</i>	6	0	0	4	2
Content module 4.					
The differential diagnosis of infectious diseases with air-drop mechanism of transmission					
Topic 13. The differential diagnosis of the diseases with respiratory syndrome.	4	0	0	2	2
Topic 14. Differential diagnosis of angina	2	0	0	2	0
Topic 15. Infectious mononucleosis	2	0	0	0	2
Topic 16. Differential diagnosis of infectious diseases with meningeal syndrome Meningeal syndrome in infectious (meningococcal meningitis, viral serous meningitis, etc.)	4	0	0	2	2
Topic 17. Differential diagnosis of infectious diseases with meningeal syndrome Primary and secondary meningitis. Serous and purulent meningitis.	2	0	0	2	0
Topic 18. Tick and Japanese encephalitis.	2	0	0	0	2
<i>Total in content module 4</i>	16	0	0	8	8
Content module 5.					
Differential diagnosis of exanthemas					
Topic 19. Differential diagnosis of exanthemas	4	0	0	2	2
Topic 20. Lyme disease. Erysipelas	2			2	

<i>Total in content module 5</i>	6	0	0	4	2
Content module 6.					
Differential diagnosis of lymphadenopathies					
Topic 21. Differential diagnosis of lymphadenopathies	4	0	0	2	2
Topic 22. HIV-infection \ AIDS	2	0	0	2	
<i>Total in content module 6</i>	6	0	0	4	2
Content module 7.					
Differential diagnosis of diseases with syndrome of prolonged fever					
Topic 23. Differential diagnosis of diseases with syndrome of prolonged fever	2	0	0	2	0
Topic 24. Malaria	2	0	0	2	0
<i>Total in content module 7</i>	4	0	0	4	0
At all	60	0	0	40	20

5. Topics of lectures / seminars / practicals / labs

5.1. Topics of lectures

Lectures are not provided

5.2. Topics of seminars

Seminars are not provided

5.3. Topics of practical sessions

№	Topics	Practical Classes
1.	Topic 1. «The general characteristics of zoonotic infections».	2
2.	Topic 2. «Plague. Anthrax».	2
3.	Topic 3. «Brucellosis. Tularemia».	2
4.	Topic 4. «Rabies».	2
5.	Topic 5. «Especially dangerous diseases. The concept of biosafety. Hemorrhagic fevers: Ebola, Lassa, Marburg».	2
6.	Topic 6. «Natural and monkey pox».	2
7.	Topic 7. «The differential diagnosis of the diseases with syndrome of diarrhea: salmonellosis, shigellosis, food-borne infections, botulism».	2
8.	Topic 8. «The differential diagnosis of the diseases with syndrome of diarrhea: escherichiosis, campylobacteriosis, cholera, yersiniosis, viral diarrhea, parasitic invasions of the intestines».	2
9.	Topic 11. «Differential diagnosis of diseases with syndrome of jaundice. Clinical and pathophysiological characteristics of jaundice: hemolytic, hepatic, mechanical. Clinical and laboratory syndromes: cytolysis, cholestasis, mesenchymal-inflammatory».	2
10.	Topic 12. «Differential diagnosis of diseases with syndrome of jaundice. Laboratory diagnosis of jaundice. Methods of express diagnostics. Biochemical investigations. Markers of viral hepatitis. Indications for sending the patient to the hospital. Primary anti-epidemic measures. Acute hepatic encephalopathy. Causes, clinic, diagnosis, emergency care».	2
11.	Topic 13. «The differential diagnosis of the diseases with respiratory syndrome».	2
12.	Topic 14. «Differential diagnosis of angina».	2
13.	Topic 16. «Differential diagnosis of infectious diseases with meningeal syndrome».	2

	Meningeal syndrome in infectious (meningococcal meningitis, viral serous meningitis, etc.)».	
14.	Topic 17. Differential diagnosis of infectious diseases with meningeal syndrome. Primary and secondary meningitis. Serous and purulent meningitis».	2
15.	Topic 19. «Differential diagnosis of exanthemas».	2
16.	Topic 20. «Lyme disease. Erysipelas».	2
17.	Topic 21. «Differential diagnosis of lymphadenopathies».	2
18.	Topic 22. «HIV-infection \ AIDS».	2
19.	Topic 23. «Differential diagnosis of diseases with syndrome of prolonged fever».	2
20.	Topic 24. «Malaria».	2
	At all	40

5.4. Topics of laboratory sessions

Laboratory sessions are not provided

6. Acquirers' self-study activities

№	Topics	Self-study
1.	Topic 7. The differential diagnosis of the diseases with syndrome of diarrhea: salmonellosis, shigellosis, food-borne infections, botulism.	2
2.	Topic 9. General characteristics of helminthiasis. Intestinal protozoal invasions: giardiasis, balantidiasis.	2
3.	Topic 10. Intestinal yersiniosis. Pseudotuberculosis	2
4.	Topic 11. Differential diagnosis of diseases with syndrome of jaundice. Clinical and pathophysiological characteristics of jaundice: hemolytic, hepatic, mechanical. Clinical and laboratory syndromes: cytolysis, cholestasis, mesenchymal-inflammatory.	2
5.	Topic 13. The differential diagnosis of the diseases with respiratory syndrome.	2
6.	Topic 15. Infectious mononucleosis	2
7.	Topic 16. Differential diagnosis of infectious diseases with meningeal syndrome Meningeal syndrome in infectious (meningococcal meningitis, viral serous meningitis, etc.)	2
8.	Topic 18. Tick and Japanese encephalitis.	2
9.	Topic 19. Differential diagnosis of exanthemas	2
10.	Topic 21. Differential diagnosis of lymphadenopathies	2
11.	At all	20

Teaching techniques

Practical classes: conversation, role-playing, solving clinical situational problems, practicing the skills of examining a patient, practicing the skills of performing manipulations according to list 5, skills of differential diagnosis of the most common diseases.

Independent work: independent work with recommended basic and additional literature, with electronic information resources, preparation for practical classes; independent work with a bank of test tasks Step-2, independent mastering of communication algorithms with the patient.

8. Forms of control and evaluation methods (including criteria for evaluating learning outcomes)

Current control: oral questioning, testing, assessment of practical skills, assessment of communication skills during a role play, solving situational clinical problems, assessment of activity in the classroom.

Final control: exam.

Assessment of current learning activities in the practical class:

1. Assessment of theoretical knowledge on the topic of the lesson:

- methods: questioning, solving a situational clinical problem

- maximum grade - 5, minimum grade - 3, unsatisfactory grade - 2.

2. Assessment of work with a patient and practical skills on the topic of the class.

- **Methods:** a) assessment of communication skills with the patient,

b) correctness of appointment and assessment of laboratory and instrumental studies, c) compliance with the algorithm of differential diagnosis, d) justification of clinical diagnosis

diagnosis, e) drawing up a treatment plan.

- The maximum grade is 5, the minimum grade is 3, and the unsatisfactory grade is 2.

The grade for one practical lesson is the arithmetic mean of all components and can only have an integer value (5, 4, 3, 2), which is rounded by the method of statistics

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.

Only those applicants who have fulfilled the requirements of the curriculum in the discipline, have no academic debt, and whose average score for the current academic activity in the discipline is at least 3.00 are allowed to take the final examination.

Assessment of students' learning outcomes during the final control - oral standardised examination.

The methodology of the oral standardised examination is unified, transparent and involves the use of standardised forms. The number of questions included in the oral standardised examination corresponds to the number of credits allocated for the study of the discipline

The form of the examination paper is standardised and consists of structural elements (components). An examination paper may consist of theoretical questions only or with the addition of a case study. Each question paper may contain from 3 to 5 questions. The questions are short, simple, clear, precise and transparent, and are designed in such a way that a complete answer to them takes no more than 5 minutes. The timing of the oral structured exam is standard - no more than 30 minutes.

Each question is accompanied by a checklist (answer model), which includes the key points required to provide a complete answer to the question. Each answer template is accompanied by a reference source with pages.

During the oral structured examination, the applicant sees the question, the teacher sees the checklist with the standard answers and determines which components were or were not mentioned by the applicant.

The total grade for the oral structured examination is calculated as the arithmetic mean of all the grades received for answering the questions (including situational tasks).

The package of documents for the oral structured examination: a list of questions, answer standards (checklists), is reviewed by the subject cycle methodological commission.

9. Distribution of points received by acquirers of higher education

The obtained grade point average for the discipline for acquirers who have successfully completed the work program of the discipline is converted from the traditional four-point scale to points on a 200-point scale, as shown in the table:

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

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

A multi-point scale (200-point scale) characterizes the actual performance of each acquirer in mastering the educational component. The conversion of the traditional grade (grade point average for a discipline) into a 200-point scale is performed by the University's Information Technology Department.

According to the points obtained on a 200-point scale, the achievements of applicants are evaluated according to the ECTS rating scale. Further ranking according to the ECTS rating scale allows to evaluate the achievements of applicants in the educational component who study in one course of one specialty, according to the points they received.

The ECTS scale is a relative and comparative rating scale that establishes the applicant's belonging to the group of the best or worst among the reference group of fellow acquirers (faculty, specialty). Grade A on the ECTS scale cannot be equal to grade A, and grade B cannot be equal to grade B, etc. When converting from a multi-point scale, the limits of grades "A", "B", "C", "D", "E" on the ECTS scale do not coincide with the limits of grades "5", "4", "3" on the traditional scale. Applicants who have received grades "FX" and "F" ("2") are not included in the list of ranked applicants. The grade "FX" is assigned to applicants who have scored the minimum number of points for current academic activities, but who have not been credited with the final control. The grade "F" is assigned to applicants who have attended all classes in the discipline, but have not gained an average score (3.00) for current academic activities and are not allowed to take the final control.

Acquirers enrolled in the same course (one specialty), based on the number of points gained in the

discipline, are ranked on the ECTS scale as follows:

**Conversion of the traditional grade from the discipline and
the sum of points on the ECTS scale**

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

10. Methodological back-up

- The course’s work program;
- The syllabus;
- Methodical manuals to practical sessions;
- Guidelines to s acquirers’ self-studies;
- Multimedia presentations;
- Case study assignments;
- Cases of laboratory studies results
- Role-play scenarios
- Examination cards for the exam
- KROK-2 database;

11. Questions for preparing for the final control

1. General characteristics of zoonotic infections.
2. Particularly dangerous infections (infections regulated by international health regulations). Biological weapons and biosafety.
3. Dehydration shock. Causes, clinical signs, emergency care.
4. Differential diagnosis of jaundice: suprahepatic, hepatic and subhepatic. Laboratory diagnosis of jaundice.
5. Acute hepatic encephalopathy. Causes of occurrence, clinical signs, emergency care.
6. Septic shock. Causes of occurrence, clinical signs, emergency care.
7. Meningeal syndrome in infectious and non-infectious diseases. Primary and secondary meningitis. Changes in the cerebrospinal fluid in purulent and serous meningitis.
8. Cerebral edema-swelling syndrome. Causes of occurrence, clinical signs, emergency care.
9. Characteristics of exanthem Differential diagnosis of infectious diseases with manifestations of exanthem: typhoid and typhoid fever, meningococemia and haemorrhagic fever.
10. “Children's’ drip infections (measles, rubella, chickenpox) in adults.
11. Differential diagnosis of lymphadenopathies (rubella, HIV infection, plague, tularemia, toxoplasmosis, brucellosis)
12. Malarial coma. Clinic. Diagnosis. Treatment.
13. Modern methods of treatment and prevention of malaria.
14. Haemoglobinuric fever. Clinic. Diagnosis. Treatment.
15. Differential diagnosis of viral hepatitis with faecal-oral mechanism of transmission and haemocontact hepatitis. Markers of viral hepatitis.
16. AIDS-associated infections.

17. Principles of prescribing HAART to patients with HIV infection. Stages of laboratory diagnosis of HIV infection. Pre-exposure and post-exposure prophylaxis of HIV infection. Rules of prescription.
18. Syndrome of prolonged fever.
19. Calendar of preventive vaccinations in Ukraine: rules of vaccination.
20. Acute respiratory failure. Causes of occurrence, clinical signs, emergency care.
21. Plague. Anthrax. Etiology. Epidemiology. Pathogenesis. Clinic. Diagnosis. Treatment. Prevention.
22. Tularemia. Brucellosis. Etiology. Epidemiology. Pathogenesis. Clinic. Diagnosis. Treatment. Prevention.
23. Rabies. Tetanus. Etiology. Epidemiology. Pathogenesis. Clinic. Diagnosis. Treatment. Prevention.
24. Hemorrhagic fevers. Hemorrhagic fever with renal syndrome. Crimean-Congo fever. Etiology. Epidemiology. Pathogenesis. Clinic. Diagnosis. Treatment. Prevention.
25. Particularly contagious haemorrhagic fevers: Ebola, Lassa, Marburg.
26. Smallpox and monkeypox. Etiology. Epidemiology. Pathogenesis. Clinic. Diagnosis. Treatment. Prevention.
27. Acute infectious diseases with diarrhoea syndrome. Salmonellosis. Shigellosis. Escherichiosis. Cholera. Etiology. Epidemiology. Pathogenesis. Clinic. Diagnosis. Treatment. Prevention.
28. Acute infectious diseases with diarrhoea syndrome. Food toxicity infections. Botulism. Etiology. Epidemiology. Pathogenesis. Clinic. Diagnosis. Treatment. Prevention.
29. Intestinal yersinosis and pseudotuberculosis. Etiology. Epidemiology. Pathogenesis. Clinic. Diagnosis. Treatment. Prevention.
30. Protozoan diseases of the intestine. Amoebiasis. Giardiasis. Balatidiasis. Etiology. Epidemiology. Pathogenesis. Clinic. Diagnosis. Treatment. Prevention.
31. Influenza and other acute respiratory viral infections (SARS, MERS, COVID-19). Epidemiology. Pathogenesis. Clinic. Diagnosis. Treatment. Prevention.
32. Infectious diseases with lesions of the oropharynx. Diphtheria. Infectious mononucleosis. Epidemiology. Pathogenesis. Clinic. Diagnosis. Treatment. Prevention.
33. Tick-borne and Japanese encephalitis. Epidemiology. Pathogenesis. Clinic. Diagnosis. Treatment. Prevention.
34. Lyme borreliosis. Epidemiology. Pathogenesis. Clinic. Diagnosis. Treatment. Prevention.
35. Erysipelas. Epidemiology. Pathogenesis. Clinic. Diagnosis. Treatment. Prevention.
36. Malaria. Etiology. Epidemiology. Pathogenesis. Clinical manifestations. Diagnosis. Features of the clinical course of various forms of malaria
37. Typhoid fever. Epidemiology. Pathogenesis. Clinic. Diagnosis. Treatment. Prevention.
38. HIV infection. Etiology. Epidemiological features. Pathogenesis. Classification of clinical stages.
39. Acute hepatitis A, E. Epidemiology. Pathogenesis. Clinic. Diagnosis. Treatment. Prevention.
40. Acute hepatitis B, C, D. Epidemiology. Pathogenesis. Clinic. Diagnosis. 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. ВСВ «Медицина», 2018. (APPROVED by the Ministry of Education and Science of Ukraine as a textbook for students of higher medical educational establishments; APPROVED by the Ministry of Health of Ukraine as a textbook for students 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. Nadruga, L.V. Pypa et al.; edited by S.O. Kramarov, O.B. Nadruga. — 4th edition. — Kyiv: AUS Medicine Publishing, 2020. — 240 p.

Additional

1. Comprehensive Textbook of Infectious Disease: M. I. Sahadulla, S. A. Udman. – 2nd edition. Jaypee Brothers, Medical Publishers Pvt. Limited, 2019 – 835 p.
2. 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. : ВСВ «Медицина», 2019. — 744 с. Tropical infections: manual/ed. MA Andreychyn, VD Moskaliuk. - Lviv: "Magnolia 2006", 2019. - 220 p.
3. Tropical infections: manual/ed. MA Andreychyn, VD Moskaliuk. - Lviv: "Magnolia 2006", 2019. - 220 p.
4. General epidemiology: study guide (IV a. 1.) / N.O. Vynograd. — 3rd edition, corrected K: ВСВ «Медицина», 2017. – 128 с.
5. Hagberg H., Wennerholm U.B., Savman K. // Current Opinion in Infection Disease». – 2015. - Vol. - № 3. - P. 301-306.
6. 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.
7. CDC Yellow Book Travelers Health – 2020 (www.cdc.gov/yellowbook)

Information resource:

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