

Department of Infectious Diseases



"APPROVED"

First Vice-Rector on

Scientific and Pedagogical Work

Associate Professor Iryna SOLONYNKO

_____ 2023

DISCIPLINE PROGRAM

SB 3.1.1.3. INFECTIOUS DISEASES

(name of the academic discipline)

training of specialists of the second (master's) level of higher education

field of knowledge 22 "Healthcare"

specialty 222 "Medicine"

individual profile course of choice: Internal medicine

Discussed and approved
at the methodological meeting of the department
Infectious diseases
Minutes No. 27 dd. 27.04.2023
Head of department

Professor Zinchuk O.M.

Approved
specialized methodological commission on
therapeutic disciplines
Minutes No. 3 dd. 04.05.2023
Chairman of the profile methodological
commission

Professor Radchenko O.M.

DEVELOPED AND SUBMITTED BY: Danylo Halytsky Lviv National Medical University
(full name of the higher educational institution)

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INTRODUCTION

The program of studying the discipline "Infectious diseases" is compiled in accordance with the Standard of higher education of Ukraine of the second (Master) level

Branch of knowledge 22 "Healthcare"

Specialty 222 "Medicine"

Academic program Master of Medicine

Individual profile course of choice: Internal medicine

Description of the discipline (annotation) Academic discipline "Infectious diseases" provides an opportunity for students of the School of Medicine in the 6th year of study to master knowledge, skills and practical skills that enable a specialist to quickly and correctly orient themselves in situations in the presence of infectious pathology and other urgent conditions in patients, avoid fatal mistakes or time loss and take priority steps that will save a person's life and/or become a good basis for its successful further treatment in the hospital. The assimilation of discipline is based on the knowledge gained by students in the process of studying biology, physiology, microbiology, epidemiology and other basic subjects.

When mastering the discipline "Infectious diseases" rational is the introduction into the educational process of modern world developments and standards on the main issues of infectious diseases.

Structure of the discipline	Number of credits, hours, of which			Year of study term	Type of control	
	total	Classroom				IWS
		Lectures (hours)	Practical classes (hours)			
Name of the discipline: Infectious diseases	2,5 credits / 75 hours		38	37	6 course (11/12 term)	Credit

The subject of the discipline is the main manifestations of infectious diseases, the principles of correct interpretation of clinical information obtained during the examination of the patient and the basic principles of treatment of patients with infectious pathology.

Interdisciplinary connections: biology, microbiology, epidemiology, immunology.

1. The goal and tasks of the discipline

1.1. The goal of the discipline "Infectious diseases" is the assimilation of theoretical and practical knowledge of etiology, epidemiology, pathogenesis, typical clinical manifestations, methods of diagnosis, treatment of infectious pathology within the limits corresponding to the program of training a doctor, taking into account the peculiarities of his specialty.

1.2. The main tasks of the discipline "Infectious diseases" is the mastery of knowledge, skills and abilities to ensure the adaptation of students to patients of infectious profile; ability to make a diagnosis, choose appropriate medical and diagnostic manipulations, provide emergency care to patients with infectious pathology.

1.3 Competences and learning outcomes, the formation of which is facilitated by discipline (relationship with the normative content of training of higher education applicants, formulated in terms of the results of training in the Standard).

In accordance with the requirements of the standard, discipline ensures that students acquire **competencies**:

-*integrated*: the ability to solve complex problems, including those of a research and innovation nature in the field of medicine. Ability to continue learning with a high degree of autonomy;

-*general*:

GC. 1. Ability to abstract thinking, analysis and synthesis.

GC. 2. Ability to learn and master modern knowledge.

GC. 3. Ability to apply knowledge in practical situations.

- GC. 4. Knowledge and understanding of the subject area and understanding of professional activity
- GC. 5. Ability to adapt and act in a new situation.
- GC. 6. Ability to make informed decisions.
- GC. 7. Ability to work in a team.
- GC. 8. Ability to interpersonal interaction.
- GC. 10. Ability to use information and communication technologies.
- GC. 11. Ability to search, process and analyze information from various sources
- GC. 12. Determination and persistence in relation to assigned tasks and assumed responsibilities.
- GC. 14. Ability to be aware of own rights and responsibilities as a member of society, to be aware of the values of civil (free democratic) society and the need for its sustainable development, the rule of law, human rights and freedoms. and a citizen of Ukraine.
- GC. 15. Ability to preserve and multiply moral, cultural, scientific values and achievements of society based on an understanding of 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.

-special (professional, substantive):

- SC. 1. Ability to collect medical information about the patient and analyze clinical data.
- SC. 2. Ability to determine the necessary list of laboratory and instrumental studies and evaluate their results.
- SC. 3. Ability to establish a preliminary and clinical diagnosis of the disease.
- SC. 4. Ability to determine the necessary regime of work and rest in the treatment of diseases.
- SC. 5. Ability to determine the nature of nutrition in the treatment and prevention of diseases.
- SC. 6. Ability to determine the principles and nature of treatment and prevention of diseases.
- SC. 7. Ability to diagnose emergency conditions.
- SC. 8. Ability to determine tactics and provide emergency medical care.
- SC. 9. Ability to carry out medical evacuation measures.
- SC. 10. Ability to perform medical manipulations.
- SC. 11. Ability to solve medical problems in new or unfamiliar environments in the presence of incomplete or limited information, taking into account aspects of social and ethical responsibility.
- SC. 13. Ability to carry out sanitary and hygienic and preventive measures.
- SC. 14. Ability to plan and carry out preventive and anti-epidemic measures for infectious diseases.
- SC. 16. Ability to maintain medical documentation, including electronic forms.
- SC. 21. Clearly and unambiguously communicate one's own knowledge, conclusions and arguments on health care problems and related issues to specialists and non-specialists, in particular to people who are studying.
- SC. 24. Adherence to ethical principles when working with patients and laboratory animals.
- SC. 25. Adherence to professional and academic integrity, to be responsible for the reliability of the obtained scientific results.

Detailed competences in accordance with the NRC descriptors in the form of the Competence Matrix.

Competency matrix

№	Competence	Knowledge	Skill	Communication	Autonomy and responsibility
Integral competence		Ability to solve complex problems, including those of a research and innovation nature in the field of medicine. Ability to continue learning with a high degree of autonomy.			
General competencies					
GC.1.	Ability to abstract thinking, analysis and synthesis.	Know methods of analysis, synthesis and further modern education	Be able to analyze information, make informed decisions, be able to acquire modern knowledge	Establish appropriate connections to achieve goals.	To be responsible for the timely acquisition of modern knowledge.
GC.2.	Ability to learn and master modern knowledge.	Know the current trends in the development of the industry and analyze them	Be able to analyze professional information, make informed decisions, acquire up-to-date knowledge	Establish appropriate connections to achieve goals	To be responsible for the timely acquisition of modern knowledge
GC.3.	Ability to apply knowledge in practical situations	Have specialized conceptual knowledge acquired in the learning process.	To be able to solve complex tasks and problems that arise in professional activity.	Clear and unambiguous presentation of one's own conclusions, knowledge and explanations that justify them to specialists and non-specialists.	Be responsible for making decisions in difficult conditions
GC.4.	Knowledge and understanding of the subject area and understanding of professional activity	Have in-depth knowledge of the structure of professional activity.	To be able to carry out professional activities that require updating and integration of knowledge.	The ability to effectively form a communication strategy in professional activities	To be responsible for professional development, the ability for further professional training with a high level of autonomy.
GC.5.	Ability to adapt and act in a new situation	Know the types and methods of adaptation, the principles of action in a new situation	To be able to apply means of self-regulation, to be able to adapt to new situations (circumstances) of life and activity.	Establish appropriate connections to achieve results.	Be responsible for the timely use of self-regulation methods.
GC.6.	Ability to make informed decisions	Know communication tactics and strategies, laws and methods	Be able to make a reasoned decision, to choose	To use communication strategies and interpersonal skills	Be responsible for the choice and tactics of the method
GC.7.	Ability to work in a team	To know communication tactics and strategies, laws and methods of communicative behavior.	Be able to choose communication methods and strategies to ensure effective teamwork	To use communication strategies	To be responsible for the choice and tactics of the method of communication
GC.8.	Ability to interpersonal interaction	Know the laws and methods of interpersonal interaction	Be able to choose communication methods and strategies for interpersonal interaction	To use interpersonal skills	To be responsible for the choice and tactics of the method of communication
GC.10.	Ability to use information and communication technologies	Have deep knowledge in the field of information and communication technologies used in professional activities	To be able to use information and communication technologies in a professional field that requires updating and integration of knowledge	Use information and communication technologies in professional activities	To be responsible for the development of professional knowledge and skills.

GC.11.	Ability to search, process and analyze information from various sources	Know the system of official document flow in the professional work of a doctor, including modern computer information technologies.	Be able to determine the source and location of the required information depending on its type. Be able to process information and analyze the received information	Obtain the necessary information from a specified source and, based on its analysis, form appropriate conclusions	Be responsible for the completeness and quality of information analysis and conclusions based on its analysis.
GC.12.	Determination and persistence in relation to assigned tasks and assumed responsibilities	Know the responsibilities and ways of performing assigned tasks	To be able to determine the goal and task, to be persistent and conscientious in the performance of duties	Establish interpersonal relationships for effective performance of tasks and responsibilities	To be responsible for the high-quality performance of assigned tasks
GC.14.	The ability to realize one's own rights and responsibilities as a member of society, to be aware of the values of a civil (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	Know your rights and responsibilities as a member of society	To be able to realize one's rights and responsibilities as a member of society	Realize your rights and responsibilities as a member of society	To be responsible for the quality performance of one's duties as a member of society
GC.15.	The ability to preserve and multiply moral, cultural, scientific values and achievements of society based on an understanding of 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 (motives)	To know the moral, cultural, scientific values and achievements of society, its place in the general system of knowledge about nature and society and in the development of society, technology and technology	To be able to preserve and multiply moral, cultural, scientific values and achievements of society	To preserve and multiply moral, cultural, scientific values and achievements of society	To be responsible for the preservation and multiplication of moral, cultural, scientific values and achievements of society
Special (professional) competencies					
SC.1.	Ability to collect medical information about the patient and analyze clinical data of shock	To have specialized knowledge about a person, a child, his organs and systems, to know the methods and standard schemes of the patient's survey and physical examination. Know the methods of assessing the state of intrauterine development of the fetus. Know the stages and methods of examination of the child's psychomotor and physical development.	Be able to conduct a conversation with a patient (including a child), on the basis of algorithms and standards, using standard methods to conduct a physical examination of the patient. Be able to examine the child's psychomotor and physical development. Be able to assess the state of health of a person (including a child).	Effectively form a communication strategy when communicating with the patient. Enter information about the child's state of health in the relevant medical documentation	To be responsible for the quality collection of information obtained on the basis of an interview, examination survey, palpation, percussion of organs and systems and for timely assessment of the state of: human health, psychomotor and physical development of the child and intrauterine development of the fetus and for taking appropriate measures

SC.2.	Ability to determine the necessary list of laboratory and instrumental studies and evaluate their results	Have specialized knowledge about a person, his organs and systems, know the principles of laboratory and instrumental research and evaluation of their results	Be able to analyze the results of laboratory and instrumental studies and, based on them, evaluate information about the patient's diagnosis	Reasonably prescribe and evaluate the results of laboratory and instrumental research	Be responsible for the correct and timely evaluation of information regarding the results of laboratory and instrumental research in the conditions of a health care institution
SC.3.	Ability to establish a preliminary and clinical diagnosis of the disease	To have specialized knowledge about a person, a child, his organs and systems, to know the diagnosis algorithm in the conditions of a health care institution	Be able to: identify and record the leading clinical symptom or syndrome; establish the most likely syndromic diagnosis of the disease, prescribe laboratory and/or instrumental examination of the patient, carry out differential diagnosis of diseases	On the basis of regulatory documents, maintain the patient's medical documentation (ambulatory/inpatient card, etc.).	Adhering to ethical and legal norms, bear responsibility for making informed decisions and actions regarding the correctness of the established preliminary and clinical diagnosis of the disease.
SC.4.	The ability to determine the necessary regime of work and rest in the treatment of diseases.	Have specialized knowledge about a person, his organs and systems; ethical and legal norms; algorithms and standard schemes for determining the mode of work and rest during treatment, based on the preliminary and clinical diagnosis of the disease (according to list 2)	Be able to determine, on the basis of preliminary and clinical diagnosis, by making a reasoned decision, the necessary regime of work and rest during the treatment of the disease (according to list 2).	Form and convey to the patient and specialists the necessary regime of work and rest during the treatment of the disease (according to list 2).	Be responsible for the reasonableness of prescribing the work and rest regime during the treatment of the disease (according to list 2).
SC.5.	The ability to determine the nature of nutrition in the treatment and prevention of diseases	Have specialized knowledge about a person, his organs and systems; algorithms and standard schemes for prescribing nutrition in the treatment of diseases (according to list 2).	Be able to determine, on the basis of a preliminary and clinical diagnosis, the nature of nutrition in the treatment of diseases (according to list 2).	Form and convey to the patient and specialists conclusions about nutrition during the treatment of the disease (according to list 2).	Be responsible for the reasonableness of the definition of nutrition in the treatment of the disease (according to list 2).
SC.6.	Ability to determine the principles and nature of treatment and prevention of diseases	Have specialized knowledge of algorithms and standard disease treatment schemes (according to list 2)	Be able to determine the principles and nature of treatment of the disease (according to list 2).	Form and convey to the patient and specialists own conclusions regarding the principles and nature of treatment (according to list 2).	Be responsible for making a decision regarding the principles and nature of the treatment of the disease (according to list 2).

SC.7.	Ability to diagnose emergency conditions	Have specialized knowledge about a person, his organs and systems, standard methods of examining a person (at home, on the street, in a health care facility) in conditions of lack of information.	Be able to, in conditions of lack of information, use standard methods, by making a reasoned decision to assess the patient's condition and determine the main clinical syndrome (or what determines the severity of the condition of the victim/injured) (according to list 3)	Under any circumstances, in compliance with the relevant ethical and legal norms, make a reasoned decision regarding the assessment of the severity of the person's condition, the diagnosis and the organization of the necessary medical measures depending on the person's condition; fill out the relevant medical documents	Be responsible for the timeliness and effectiveness of medical measures to diagnose emergency conditions
SC.8.	Ability to determine tactics and provide emergency medical care	Know the legislative framework for the provision of emergency medical care, in particular the Law of Ukraine "On Emergency Medical Care". Have specialized knowledge about emergency human conditions; principles of providing emergency medical care	Be able to identify emergency situations (according to list 3); principles and tactics of providing emergency medical care; to carry out organizational and diagnostic measures aimed at saving and preserving human life.	Reasonably formulate and prove to the patient or his legal representative the need for emergency care and obtain consent for medical intervention	To be responsible for the correct definition of an emergency condition, its degree of severity and the tactics of providing emergency medical aid.
SC.9.	Ability to carry out medical evacuation measures	Know the existing system of medical and evacuation support	To organize medical evacuation activities among the population and military personnel in emergency situations, including in field conditions, during the deployed stages of medical evacuation, taking into account the existing system of medical and evacuation support	It is justified to resolve the issue of isolation of patients suspected of having an infectious disease, taking into account the danger of sources of pathogens of infectious diseases	To be responsible for making a decision regarding the isolation of sources of pathogens of infectious diseases
SC.10.	Ability to perform medical manipulations	Have specialized knowledge about a person, his organs and systems, anatomic-physiological and age-related features; knowledge of algorithms for performing medical manipulations (according to list 5)	Be able to perform medical manipulations (according to list 5).	Reasonably form and prove to the patient, and/or his parents (guardians), specialists conclusions regarding the need for medical manipulations (according to list 5)	To be responsible for the quality of medical manipulations (according to list 5)

SC.11.	Ability to solve medical problems in new or unfamiliar environments in the presence of incomplete or limited information, taking into account aspects of social and ethical responsibility.	Have specialized knowledge of medical problems	Be able to solve medical problems in new or unfamiliar environments in the presence of incomplete or limited information, taking into account aspects of social and ethical responsibility	Reasonably solve medical problems in new or unfamiliar environments	Be responsible for solving medical problems in new or unfamiliar environments in the presence of incomplete or limited information, taking into account aspects of social and ethical responsibility
SC.13.	Ability to carry out sanitary and hygienic and preventive measures	Know the principles and systems of planning and carrying out preventive and anti-epidemic measures in typical conditions and in conditions of epidemic adversity	To be able to organize preventive and anti-epidemic measures	Inform the population, heads of relevant institutions and enterprises about the timely implementation of preventive and anti-epidemic measures	To be responsible for qualitative analysis of population morbidity indicators, timely implementation of relevant preventive and anti-epidemic measures
SC.14.	Ability to plan and carry out preventive and anti-epidemic measures for infectious diseases	Know the principles and systems of planning and carrying out preventive and anti-epidemic measures for infectious diseases in typical conditions and in conditions of epidemic adversity based on the results of analysis, data from the examination of the center of infectious diseases. Know the methods of detection and early diagnosis of infectious diseases, the organization of primary anti-epidemic measures in the center of infectious diseases. Know preventive and anti-epidemic methods of organizing measures to prevent the spread of infectious diseases.	To be able, based on epidemiological analysis, to use preventive and anti-epidemic methods, to plan measures to prevent the spread of infectious diseases (according to list 2) To be able to organize the implementation of preventive and anti-epidemic measures for infectious diseases in a health care institution, among the fixed population and in centers of infectious diseases based on epidemiological analysis by risk groups, risk area, time and risk factors	Inform the population, heads of relevant institutions and enterprises about the timely implementation of preventive and anti-epidemic measures, vaccinations, etc.	To be responsible for the qualitative analysis of indicators of infectious morbidity of the population, the timely implementation of appropriate preventive and anti-epidemic measures
SC.16.	Ability to maintain medical documentation, including electronic forms	Know the system of official document flow in the professional work of a doctor, including modern computer information technologies.	Be able to determine the source and location of the required information depending on its type. Be able to process information and analyze the received information	Obtain the necessary information from a specified source and, based on its analysis, form appropriate conclusions.	Be responsible for the completeness and quality of information analysis and conclusions based on its analysis.

SC.21.	Clearly and unambiguously communicate one's own knowledge, conclusions and arguments on health care problems and related issues to specialists and non-specialists, in particular to people who are studying	Have specialized knowledge of health care issues	Be able to apply the acquired knowledge of medical problems	Ability to communicate one's professional position to patients, their family members, and colleagues	Be responsible for the provided information on health care issues
SC.24.	Adherence to ethical principles when working with patients and laboratory animals	Know the basics of ethics and deontology	Be able to apply ethical and deontological norms and principles in professional activity	The ability to communicate one's professional position to patients, their family members, and colleagues	To be responsible for the implementation of ethical and deontological norms and principles in professional activity
SC.25.	Adherence to professional and academic integrity, to be responsible for the reliability of the obtained scientific results	Know the basics of professional and academic integrity	To be able to observe professional and academic integrity	Ability to adhere to the principles of professional and academic integrity	Be responsible for the reliability of the obtained scientific results

Learning outcomes:

Integrative final program learning outcomes, the formation of which is due to the educational discipline:

1. Identify different clinical variants and complications of the most common infectious diseases;
2. Plan the examination of the patient and interpret the obtained results for the most common infectious diseases;
3. Carry out differential diagnosis and make a preliminary clinical diagnosis of the most common infectious diseases;
4. Determine the tactics of patient management in the most common infectious diseases;
5. Demonstrate the ability to maintain medical documentation in the clinic of infectious diseases;
6. Diagnose and provide emergency care for major emergencies in the clinic of infectious diseases (shock, coma, allergic reactions, asphyxia, cerebral edema, convulsive syndrome).

Learning outcomes for the discipline:

PLO.1. 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. (GC1, GC2, GC3, GC4, GC5, GC6, GC7, GC8, GC10, GC11, GC12, GC14, GC15, SC1, SC2, SC3, SC4, SC5, SC6, SC7, SC8, SC9, SC10, CS11, SC13, SC14, SC16, SC21, SC24, SC25)

PLO.2. Understanding and knowledge of basic and clinical biomedical sciences, at a level sufficient for solving professional tasks in the field of health care. (GC4, GC6, GC10, GC11, GC12, SC1, SC2, SC3, SC4, SC5, SC6, SC7, SC8, SC9, SC10, CS11, SC13, SC14, SC16, SC24)

PLO.3. Specialized conceptual knowledge that includes scientific achievements in the field of health care and is the basis for conducting research, critical understanding of problems in the field of medicine and related interdisciplinary problems. (GC1, GC2, GC3, GC6, GC7, GC10, GC11, GC12, SC1, SC2, SC3, CS11, SC21, SC24, SC25)

PLO.4. 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). (GC3, GC4, SC16, SC24)

PLO.5. Collect complaints, history of life and diseases, evaluate psychomotor and physical development of the patient, state of organs and systems of the body, based on the results of laboratory and instrumental studies, evaluate information regarding the diagnosis (according to list 4), taking into account the age of the patient. (GC1, GC2, GC3, GC6, GC7, SC1, SC2, SC3, SC7, SC8, SC16, SC24)

PLO.6. Establish the final clinical diagnosis by making a reasoned decision and analyzing the received subjective and objective data of clinical, additional examination, differential diagnosis, observing the relevant ethical and legal norms, under the control of the head physician in the conditions of the health care institution (according to the list 2). (GC1, GC2, GC3, GC6, GC7, GC8, SC1, SC2, SC3, SC7, SC8, SC11, SC16, SC24)

PLO.7. Assign 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). (GC8, SC1, SC2, SC16, SC24)

PLO.8. Determine the main clinical syndrome or what causes the severity of the victim/victim's condition (according to list 3) by making a reasoned decision and assessing 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. (GC3, GC4, SC5, SC6, SC7, SC8, SC9, SC10, SC11, SC24)

PLO.9. 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 the 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. (SC1, SC2, SC6, SC7, SC8, SC11)

PLO.10. 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. (GC4, SC4, SC5, SC24)

PLO.14. Determine tactics and provide emergency medical care in emergency situations (according to list 3) in limited time in accordance with existing clinical protocols and treatment standards. (GC5, GC7, GC8, SC1, SC7, SC11, SC16)

PLO.16. 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. (SC3, SC7, SC10, SC11)

PLO.17. 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. (GC14, GC15, SC7, SC10, SC11)

PLO.19. Plan and implement a system of anti-epidemic and preventive measures regarding the occurrence and spread of diseases among the population. (SC14)

PLO.20. Analyze the epidemiological situation and carry out measures for mass and individual, general and local prevention of infectious diseases. (GC10, GC11)

PLO.21. Search for the necessary information in the professional literature and databases of other sources, analyze, evaluate and apply this information. (GC2, GC10, GC11)

PLO.25. It is clear and unambiguous to convey one's own knowledge, conclusions and arguments on health care problems and related issues to specialists and non-specialists. (GC5, GC6, SC11)

PLO.27. Communicate freely in the national and English languages, both orally and in writing to discuss professional activities, research and projects. (GC5, GC6, GC7, GC8, GC15, SC11, SC21)

PLO.29. 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. (GC14, GC15, SC14, SC15).

2. Information volume of academic discipline

75 hours 2,5 ECTS credits are given to study the discipline.

«Infectious diseases» as an academic discipline:

a) is based on students' study of medical and biological physics, morphological disciplines, microbiology, virology and immunology, physiology, pathophysiology, internal diseases, surgery, neurology, dermatology, epidemiology, ophthalmology, otolaryngology, endocrinology, clinical pharmacology, reanimatology and integrates with these disciplines;

b) lays the foundations for students studying family medicine, which involves the integration of teaching with this discipline and the formation of the ability to apply knowledge of infectious diseases in the process of further education and in professional activities;

c) lays the foundations for a healthy lifestyle and prevention of impaired body functions in the process of vital activity.

In the general system of training a doctor, the discipline "Infectious diseases" occupies an important place, taking into account the significant prevalence of infectious pathology, the need for the formation of clinical thinking, skills and practical skills in future doctors, which ensure timely diagnosis of infectious diseases and their complications, rational treatment, the choice of optimal tactics in the case of emergency care. Special attention in the teaching of the discipline is paid to issues of early diagnosis, treatment of patients at the pre-hospital stage, which contributes to the improvement of the quality of training of doctors, primarily for the outpatient department of health care.

Types of training according to the curriculum are practical classes, independent work of students (IWS).

Practical classes according to the method of their organization are clinical and include:

1. Curation of patients with infectious diseases, which is carried out according to a given algorithm of actions of students.
2. Consideration of theoretical issues and acquisition of practical Skills according to standard lists for each practical lesson.
3. Analysis of archival histories of diseases.
4. Solving situational problems.
5. Standardized test control, oral and written survey.

Independent work of students (IWS) takes a significant place in the study of discipline. In addition to the traditional preparation of students for practical classes, as well as mastering the list of topics submitted for independent study, it includes the work of students in the clinic in extra-scientific time with the mastery of practical skills, their drawing up schemes of differential diagnostics and algorithms for examining patients. The effectiveness of the IWS should be ensured by the cooperation of students and teachers.

The assimilation of the topic is controlled in practical classes according to specific goals.

It is recommended to use the following means of diagnosing the level of students' training: computer and form testing, solving situational problems, interpreting laboratory studies, analyzing and evaluating the results of specific and instrumental examination methods, monitoring practical skills, answering standardized theoretical questions.

3. Structure of the discipline Infectious diseases

No	Theme	Lecture	Practical training	Independent work of the student
1.	Actual issues of diagnosis and treatment of infectious diseases with a predominance of fecal-oral transmission mechanism.		6	8
2.	Actual issues of diagnosis and treatment of infectious diseases with airborne transmission.		5	8
3.	Actual issues of diagnosis and treatment of neuroinfections.		5	4
4.	Actual issues of diagnosis and treatment of infectious diseases with a predominance of the transmissible way of transmission.		5	4
5.	Actual issues of diagnosis and treatment of infectious diseases with a predominance of the wound route of transmission.		12	10
6.	Emergency care for patients with infectious diseases. Scoring.		5	3
Total hours 75/2,5 credit and ECTS		0	38	37
Final control		Passed		

4. Thematic plan of lectures

According to order 1053-z (appendix 1-4) dated March 24, 2023, lectures are not provided

5. Thematic plan of practical classes in the discipline "Infectious diseases".

№ №	Theme	H
1.	<p>Actual issues of diagnosis and treatment of infectious diseases with a predominance of fecal-oral transmission mechanism. Epidemiological, pathogenetic and clinical features of intestinal infectious diseases. Typhoid fever, paratyphus A and B. Detection of infectious diseases among fevers of unknown origin. Diarrhea syndrome: etiology, pathogenesis, classification depending on the type of interaction between micro- and macroorganism, clinical features, laboratory diagnostics. Microbial food poisoning. Concept of enterotoxigenic and enteroinvasive diarrheas (salmonellosis, food toxic infections, escherichia, yersiniosis, cholera). Differential diagnosis of acute infectious and non-infectious diarrhea (poisoning with mushrooms, heavy metal salts, exacerbation of chronic diseases of the digestive system, acute gynecological and surgical diseases). Features of the clinic and diagnosis of food poisoning of microbial origin. Staphylococcus intoxication, botulism. Colitis. Intestinal infectious diseases with predominant lesions of the colon: shigelosis, amoebiasis. Features of clinical course, diagnosis and differential diagnosis of topical helminthiasis (ascarifosis, enterobiosis, strongholdoidosis, trichinosis, toxocarosis, opistorchosis, fastsiolosis, teniarynchosis, teniosis). Viral hepatitis with enteral transmission (hepatitis A and E). Peculiarities of the course of hepatitis E in non-endemic areas. Treatment and prevention of intestinal infectious diseases. Standard of medical care "Rational use of antibacterial and antifungal drugs for therapeutic and preventive purposes".</p>	6
2.	<p>Actual issues of diagnosis and treatment of infectious diseases with airborne transmission. Epidemiological, pathogenetic and clinical features of infectious diseases with airborne droplets transmission. Differential diagnosis of ARVI (influenza, parainfluenza, rhinovirus, adenovirus, respiratory-syncytial disease). Features of seasonal and pandemic influenza in pregnant women and against the background of concomitant pathology (diabetes mellitus, obesity). Clinic, diagnosis, features of the course and complications of diphtheria. Differential diagnosis of lesions of the oro- and nasopharynx, salivary glands (diphtheria, streptococcal pharyngitis/angina, fuso-spirochetal symbiosis, epidemic parotitis). Differential diagnosis of tonsillitis of various etiologies. Treatment and prevention of infectious diseases with airborne droplets transmission. Immunoprophylaxis of seasonal and pandemic influenza, diphtheria. Clinical features of pediatric infectious diseases in adults. COVID-19.</p>	5
3.	<p>Actual issues of diagnosis and treatment of neuroinfections. Meningeal syndrome in the clinic of infectious diseases. Differential diagnosis of serous and purulent meningitis. Current issues of clinical and specific laboratory diagnosis of neuroinfection, assessment of informative methods. Differential diagnosis of meningitis (primary, secondary, viral, bacterial) and encephalitis of various etiologies. Liquorological diagnosis of meningitis. Peculiarities of the clinical course of neuroinfections against the background of immunodeficiency states. Poliomyelitis: clinical forms, residual effects, diagnosis, treatment, prevention.</p>	5
4.	<p>Actual issues of diagnosis and treatment of infectious diseases with a predominance of the transmissible way of transmission. General characteristics of infectious diseases with a transmissible mechanism of transmission. Differential diagnosis, specific laboratory diagnosis of malaria, leishmaniasis. Transmissible diseases transmitted through tick bites: tick-borne encephalitis, Lyme borreliosis. Rickettsioses (epidemic typhus and Brill's disease. Q fever. Marseille fever). Hemorrhagic fevers (Omsk, Crimean, HFRS). Ebola, Lassa fever. Yellow fever. Clinical features, differential diagnosis of plague. Infectious diseases regulated by the international health and sanitary regulations of 2005. Treatment and prevention of infectious diseases with transmissible transmission.</p>	5
5.	<p>Actual issues of diagnosis and treatment of infectious diseases with a predominance of the wound route of transmission. Viral hepatitis B, C and D. Early detection of viral hepatitis, role and use of diagnostic methods, assessment of their informativeness. Differential diagnosis of acute viral hepatitis with other liver diseases (medical, toxic hepatitis, alcoholic liver disease, nonalcoholic steatohepatitis, cholestatic jaundice, hemolytic</p>	6

	jaundice, hepatitis of pregnant women). Differential diagnosis of infectious diseases accompanied by jaundice (leptospirosis, tropical malaria, sepsis, yersiniosis, infectious mononucleosis, parasitic liver damage). Social aspects of the spread of chronic viral hepatitis. Differential diagnosis, specific diagnosis of chronic viral hepatitis. Indications and contraindications, algorithm of antiviral therapy. Side effects of antiviral therapy. Erysipelas: clinical forms, diagnosis, treatment, prevention. Rabies, Tetanus (clinical forms, diagnosis, treatment, prevention, immunoprophylaxis).	
6.	HIV infection. Social consequences of the spread of HIV infection. Features of diagnosis and clinics. Classification of clinical stages, diagnostic criteria. Clinical and specific diagnosis of HIV infection. Deontological aspects of HIV infection, educational work. Principles and approaches to treatment of HIV patients. General characteristics of groups of medicines used in the treatment of HIV infection. Leading HIV-indicator infections, including mycobacterial, are the main features of their treatment. Prevention of HIV infection, prevention of mother-to-child transmission, social and psychological support for people living with HIV. Universal safety measures and organization of the doctor's work in order to prevent infection with HIV infection of health workers. Emergency measures in case of contamination with infectious material at the workplace.	6
7.	Emergency care for patients with infectious diseases. Organization and carrying out of emergency care and intensive care. Basic clinical and pathogenetic syndromes and methods of intensive care. Hyperthermia, convulsive syndrome. ITS. Acute insufficiency of adrenal glands. Thrombohaemorrhagic syndrome. Hypovolemic shock. Intestinal bleeding. Swelling of the brain. Differential diagnosis of coma. Respiratory, cardiovascular insufficiency, pulmonary edema. Liver failure. Features of diagnosis and treatment of fulminant forms of viral hepatitis. Hepatorenal syndrome. Renal failure. Anaphylactic shock. Serum disease. Scoring.	5
	Together	38

6. Thematic plan of independent work of students (IWS).

№	Theme	Number of hours	Type of control
1.	Preparation for practical classes , theoretical training and processing of practical skills.	12	Current control in a practical lesson
2.	Self-study of topics that are not included in the plan of classroom classes: Paratyphoid A and B. Listeriasis. Reovirus disease Norfolk viral infection. Helminthiasis. Rhinovirus. Corona-viral, Boca viral Metapneumovirus infection. Diseases caused by herpes viruses of 6-8 types. Other viral hepatitis (TTV, SEN, G). Giardiasis. Natural smallpox. mycoplasmosis, ornithosis, legionellosis. Differential diagnosis of tonsillitis. Syndrome of prolonged fever of unknown origin. Brucellosis. Sepsis. Hemorrhagic fevers. Erysipeloid, Cat scratch disease, Sodoku, streptobacillosis. Complications after using of drugs. Bioterrorism.	25	Current control over practice. and final lesson
	Total	37	

7. Teaching methods

Visual: When studying the discipline " Infectious diseases" a set of methods is used: - methods of verbal transmission and auditory perception of educational information (conversations, stories, explanations, discussions), methods of visual transmission and visual perception of educational information (demonstration and demonstration of slides, videos, study of literary and other sources of educational information, the use of visual means of learning), methods of transmitting educational information through practical, labor actions and tactile perception of it (training tasks and creative exercises, review of thematic patients).

Practical methods: Curation of patients, examination of patients with infectious pathology, solving clinical situational problems and tests, mastering elements of medical equipment for examination of patients.

8. Control methods

The current control is carried out during the training sessions and aims to check the students' assimilation of educational material on a 4-point (national) scale. Forms of evaluation of current educational activities are standardized and include control of theoretical and practical training. During the assessment of the assimilation of each topic for the current educational activity, the student is assessed according to the 4-point (national). At the same time, all types of work provided for by the discipline program are taken into account. The student must receive an assessment on each topic for further conversion of grades into scores on a multi-point (200-point) scale.

Evaluation criteria for current academic activities:

The assessment "**excellent**" is received by the student who took an active part in discussing the most difficult questions on the topic of the lesson, gave at least 90% of the correct answers to standardized test tasks, answered written tasks without errors, completed a practical task.

The assessment "**good**" is received by the student who participated in the discussion of the most difficult questions on the topic, gave at least 75% of the correct answers to standardized test tasks, made some minor mistakes in responses to written tasks, completed a practical task with minor errors.

The assessment "**satisfactory**" is received by a student who did not participate in the discussion of the most difficult questions on the topic, gave at least 60% of the correct answers to standardized test tasks, made significant mistakes in responses to written tasks, completed a practical task with errors.

The assessment "**unsatisfactory**" is received by a student who did not participate in the discussion of the most difficult questions on the topic, gave less than 60% of the correct answers to standardized test tasks, made gross mistakes in responses to written tasks or did not answer them at all, did not perform a practical task.

The independent work of students, which is envisaged in the topic along with the classroom, is evaluated during the current control of the topic in the relevant classroom. Assimilation of topics that are submitted only for independent work is controlled during the exam.

The student can work out the missed topics or put them on a positive assessment of the teacher during his consultations (individual work with students) no more than 3 times during the study of the discipline, thereby gaining the number of points not less than the minimum to be admitted to the credit.

9. Current control is carried out at each practical lesson in accordance with the specific goals of the topic and includes standardized forms of control of theoretical training and control of professional skills. Current control includes evaluation of the initial level of knowledge (oral or written express survey, test control using format A test tasks), evaluation of the main stage of practical training (control of professional skills during the curation of patients, solving typical situational problems), evaluation of the final level of knowledge on occupation (solving level III situational problems, interpreting the results of laboratory and other methods of examination of the patient). Assessment of current educational activities. During the evaluation of the mastery of each topic for the current educational activity, the student is given grades on a 4-point (traditional) scale, taking into account the approved evaluation criteria for the relevant discipline. At the same time, all types of work provided by the educational program are taken into account. The student must receive a grade in each topic. Assessment forms for current educational activities should be standardized and include control of theoretical and practical training.

10. The form of final control of the success of study: Estimates given on a traditional scale are converted into points. The maximum number of points that a student can score for the current educational activity while studying the discipline is 200 points. The minimum number of points that a student must score for the current educational activity in order to enroll in the discipline is 120 points.

The calculation of the number of points is carried out on the basis of the grades received by the student on the traditional scale during the study of the discipline during the semester, by calculating the arithmetic average (AA), rounded to two decimal places. The resulting value is converted into points on a multi-point scale as follows:

$$x = \frac{AA \times 200}{5}$$

For convenience, a recalculation table on a 200-point scale is given:

Recalculation of the average estimate for current activities on a multi-score scale for disciplines ending in scoring

For convenience, there is a table below for recalculation in accordance with 200 – point scale:

4 – point scale	200 – point scale
5	200
4.97	199
4.95	198
4.92	197
4.9	196
4.87	195
4.85	194
4.82	193
4.8	192
4.77	191
4.75	190
4.72	189
4.7	188
4.67	187
4.65	186
4.62	185
4.6	184
4.57	183
4.52	181
4.5	180
4.47	179
4.45	178
4.42	177
4.4	176
4.37	175
4.35	174
4.32	173
4.3	172
4.27	171
4.24	170
4.22	169
4.19	168
4.17	167
4.14	166
4.12	165
4.09	164
4.07	163
4.04	162
4.02	161
3.99	160
3.97	159
3.94	158
3.92	157
3.89	156
3.87	155
3.84	154
3.82	153
3.79	152
3.77	151
3.74	150

3.72	149
3.7	148
3.67	147
3.65	146
3.62	145
3.57	143
3.55	142
3.52	141
3.5	140
3.47	139
3.45	138
3.42	137
3.4	136
3.37	135
3.35	134
3.32	133
3.3	132
3.27	131
3.25	130
3.22	129
3.2	128
3.17	127
3.15	126
3.12	125
3.1	124
3.07	123
3.02	121
3	120
Less than 3	Insufficient

Form of summary control for the discipline is a credit. The maximum number of points a student can score for current academic activity in the study of discipline is 200 points. The minimum number of points that a student must score for current academic activity for enrollment of the discipline is 120 points.

Term credit – is a form of the summary control that involves evaluation of the material learned by the student on certain discipline, entirely on the grounds of his performing all the sorts of training activities, expected by the syllabus. Term credit is deducted according to the results of ongoing control.

Discipline points for students who have successfully completed the program are converted to the traditional 4-point scale according to the absolute criteria that are shown in the table below:

Points in discipline Score on a 4-point scale

From 170 to 200 points - 5

From 140 to 169 points - 4

From 120 to 139 points - 3

Below the minimum number of points that a student must score - 2

The ECTS score is not converted to the traditional scale because the ECTS scale and the four-point scale are independent.

The objectivity of assessing students' educational activities is checked by statistical methods (correlation coefficient between ECTS assessment and national scale assessment).

11. Methodological support

Teaching of the discipline in practical classes is provided by methodological developments, the topics of independent and individual tasks, clear means of training (presentations, educational films and other means for practicing practical skills), information resource of the department, algorithms for the implementation of practical skills and structured algorithms for controlling skills. Independent and individual work in the study of academic discipline is provided by methodological developments on the independent work of students.

12. Recommended Literature

Main (basic)

1. Infectious Diseases: textbook/ edited by O.A. Holubovska, M.A. Andreichyn, A.V. Shkurba, B.A. Herasun, O.M. Zinchuk et al. – Kyiv: AUS Medicine Publishing, 2018. – P 664
2. Harrison's infectious diseases/Dennis L Kasper; Anthony S Fauci/ New York:McGraw-Hill Education, ©2017

Additional literature

1. Dennis L. Kasper, Anthony S. Fauci. Harrison's Infectious Diseases, Third Edition. 2016
2. Katherine H. West. Infectious Disease Handbook for Emergency Care Personnel, Third Edition 3rd Edition. 2016
3. Judith A. Aberg, Morton P. Goldman, Larry D., Ph.D. Gray. Infectious Diseases Handbook: Including Antimicrobial Therapy & Diagnostic Tests/Procedures -- 6th Edition (Diagnostic Medicine Series). 2005.
4. Atlas of Infectious Diseases [M.A. Andreychyn, V.S. Kopcha, S.O. Kramarev, etc.]; edition by M.A. Andreychyn — 3rd edition. — Lviv: Magnolia, 2019. — 296 p.
5. Basics of treatment of infectious diseases. O.P. Adamovych, O.B. Vorozhbyt, O.B. Gerasun and others. Lviv: LNMU, 2015. – 124 p.
6. Recognition and diagnosis of infectious diseases/Manual for English-speaking students of medical universities. M. Kryzhanska, O. Zubach, O. Vorozhbyt. Lviv: LNMU, 2018. – 95 p.

13. Information resources

1. Verkhovna Rada of Ukraine <http://www.rada.kiev.ua>.
2. Cabinet of Ministers of Ukraine <http://www.kmu.gov.ua/>.

3. Ministry of Education, Science, Youth and Sports of Ukraine <http://www.mon.gov.ua>, www.osvita.com.
4. The Ministry of Emergencies and Protection of the Population from the Consequences of the Chernobyl <http://www.mns.gov.ua/>.
5. Ministry of Health <http://www.moz.gov.ua/ua/portal/>
6. The National Security and Defense Council of Ukraine <http://www.rainbow.gov.ua/>.