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



WORK PROGRAM IN THE COURSE

"Current challenges of HIV infection"

Level of higher education: the second (Master's)

Field of knowledge: 22 "Health care"

Specialty: 222 "Medicine"

Educational and professional program: Medicine

Odesa 2023

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 8, dated June 29, 2023).

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 / / 98 2023.
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Head of the department Tetiana CHABAN
Agreed with the EPP Guaranter
Approved by the subject cycle methodical commission on therapeutic disciplines of ONMedU
Minutes No1 dated "31"082023.
Chairman of the subject cycle methodical commission for therapeutic disciplines of ONMedU Churry Olena VOLOSHYNA
Reviewed and approved at the meeting of the department
Minutes No dated " * 20
Head of Department
(signature) (Name SURNAME)

Head of Department

(signature) (Name SURNAME)

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Indicators	Field of knowledge, Specialty, Level of higher education	Features of the academic discipline
Total amount:	22 Health care	Full-time studies
		Elective course
ECTS Credits: 3	222 Medicine	Year of training: 5
Hours: 90	222 Medicine	Semesters XI - XII
110015. 70	The second (Master's)	Lectures (0 h.)
Content modules: 3		Seminars (0 h.)
		Practical sessions (30 h.)
		Labs (0 h.)
		Self-study (60 h.)
		Individual tasks (0 h.)
		Form of final control – Credit test

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

Purpose. In the general system of training a doctor, the elective course "Current challenges of HIV infection" occupies an important place. The mastery of this course 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 HIV differential diagnostics in the process of further education and professional activities. Special attention in the course study is paid to the issues of early diagnosis, timely treatment prescription for patients, which contributes to the maximum the expected patient's lifelongevity and maintaining its quality, preventing the spread of the disease.

Objectives:

- to identify the key syndromes in HIV infection;
- to carry out a differential diagnostics and establish a preliminary clinical diagnosis of HIV infection;
- to identify HIV clinical stages;
- to plan the examination of a patient and interpret its results;
- to determine the therapeutic tactics in managing a patient with HIV infection;
- to establish a diagnosis and provide emergency care in major urgent cases;
- demonstrate the ability of HIV-infected patients' medical records keeping.

The process of the course study is aimed at forming components of the following competencies:

Integral competence (IC):

Ability to solve typical and 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):**

- 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 evaluate and ensure the quality of the 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 in the presence of incomplete or limited information, considering aspects of social and ethical responsibility.

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 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.

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).

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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 the course study, a acquirer of higher education must:

Know: aetiology, epidemiology, pathogenesis, clinic, diagnostics, differential diagnostics, treatment, prevention of HIV infection.

Be able to:

- communicate with a patient, collect complaints, life and disease history, epidemiological history, conduct an inquiry by organs and systems;

- analyse the results of laboratory, functional and instrumental tests;
- carry out a differential diagnostics and substantiate a clinical diagnosis;
- determine tactics and provide an emergency medical aid in urgent cases;
- determine features 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, the substantiation of the established diagnosis and a differentiated one, the scope of the prescribed examination, treatment tactics, the assessment of the prognosis and work capacity.

3. CONTENTS OF THE COURSE

Content module 1

Epidemiological and clinical features of HIV infection

32 hours/1.07 credits: lectures - 0, seminars - 0, practical sessions - 14, Self-study - 18)

Topic 1. The main stages of the spread of the HIV pandemic. Current epidemiological situation with HIV infection in the world and Ukraine. The modern concept of the HIV pandemic in Ukraine and in the world as a whole. The basis for the spread of HIV infection.

Topic 2. Mechanisms and modes of HIV transmission. Risk groups for HIV infection. Transmission of HIV infection from mother to child. The role of the mother in the transmission of HIV to the child, the management of pregnant women and childbirth with HIV-infection.

Topic 3. HIV structure, its replication cycle. Types of HIV, pathogenetic features and mechanisms of replication in the human body.

Topic 4. Environmental persistence of HIV. Degrees of exposure risk to the infection. Possibilities of HIV in everyday life.

Topic 5. Natural course of HIV infection. Interaction of HIV with the human body during infection.

Topic 6. HIV and human immune system. Impact of HIV on the functioning of the human immune system.

Topic 7. Modern classification of HIV stages. Main symptoms and syndromes. Characteristics of the clinical course of HIV infection. Symptoms and syndromes that accompany different clinical stages of HIV infection.

Topic 8. The notion of opportunistic infections. HIV-associated infections and diseases. Opportunistic infections in HIV-infected people, features of the course. Infections and infestations that most often accompany the course of various clinical stages of HIV-infection.

Topic 9. Clinical and epidemiological criteria for the diagnosis. The main criteria that will be taken into account when HIV is suspected and a final diagnosis is made.

Content module 2

Features of laboratory diagnosis of HIV infection

22 hours/0.7 credits: lectures - 0, seminars - 0, practical sessions - 8, Self-study - 14)

Topic 10. Principles and methods of the HIV laboratory diagnostics: ELISA, immunoblot, immunochromatographic assay. Features of conducting, indications and interpretation of the results obtained.

Topic 11. Peculiarities of express testing. The quick testing procedure. The concept of rapid tests. Procedure and rules for the use of rapid diagnosis of HIV infection.

Topic 12. Errors in the express testing procedure and results interpretation. Errors that should be taken into account when testing with rapid tests.

Topic 13. Molecular genetic tests. Flow cytometry technique. Rules of conduct, features of preparation for diagnostics.

Topic 14. Reviewing and verifying the obtained results. Rules of conduct

Topic 15. HIV public testing. Order of the Ministry of Health of Ukraine No 415 "On improvement of voluntary counselling and testing for HIV infection". General features and concepts.

Topic 16. The concept of HIV screening, its objectives (On December 31, 2021, the Ministry of Health of Ukraine updated Order No. 794 "On improving the quality management system of laboratory studies in the field of confronting HIV infection/AIDS" considering the updated WHO

recommendations). Definition of the concept of "screening", purpose, objectives and features of the screening.

Content module 3

Features of HIV counseling and ART therapy

12 hours/0.4 credits: lectures - 0, seminars - 0, practical sessions - 2, Self-study - 10)

Topic 17. Algorithm of pre-test counseling. Rules and stages of the event

Topic 18. Peculiarities of post-test counseling with negative or positive HIV test. . Rules and stages of the event

Topic 19. Counseling of various population groups (pregnant women, injection drugs users, sex industry representatives, health personnel, etc.). Rules and stages of the event

Topic 20. Highly active antiretroviral therapy (HAART) – the notion, main groups of drugs, goals and principles of its prescription. Features and sensitivity of HIV to ART.

Topic 21. HAART: drug interactions and most common side effects. Drug compatibility, quality of life on ART.

Content module 4

HIV prevention, legal and social aspects of providing medical care to people living with HIV 24 hours/0.8 credits: lectures - 0, seminars - 0, practical sessions - 6, Self-study - 18)

Topic 22. **Prevention as a key measure in confronting HIV infection. Main rules of the exposure prevention.** Basic provisions for the prevention of the spread of HIV in Ukraine and the world.

Topic 23. UNAIDS Strategy "Accelerating the end of the HIV/AIDS epidemic by 2030". 95–95–95 testing and treatment targets. Features of implementation in Ukraine and the world.

Topic 24. Understanding personal and professional risks of HIV infection. Groups of professions that are likely to become infected with HIV, ways to prevent.

Topic 25. Actions of health personnel in an accident. The concept of an emergency situation and the algorithm of actions in case of its occurrence.

Topic 26. Indications for post-exposure prophylaxis. The concept of "post-exposure prophylaxis", the specifics of carrying out in the conditions of modern medicine.

Topic 27. Regulations and legislation on the health care for HIV-infected persons. Rights and responsibilities of HIV-infected individuals. Compliance with practices in security and confidentiality of HIV/AIDS patients' information. Legal aspects and the role of a family doctor in working with HIV-infected people.

Topic 28. The notions of stigma and discrimination. Verbal and non-verbal manifestations of stigma. Types of stigmas. Causes of stigmatization and discrimination. Ways of coping. The concept of tolerance.

Topic 29. Providing palliative care to people living with HIV: concept, objectives, principles.

Topic 30. Public movement and organizations. The role of a social service specialist in assistance to people living with HIV. The role of society in overcoming stigma and discrimination against HIV-infected people.

4. Structure of the credit

4. Structure o	t the cr	ealt				
			H	lours		
		including				
Topic	Total	Lectures	Seminars	Practical sessions	Labs	Self-study
Cont	ent mod	dule 1				
Epidemiological and cl	inical fe	eatures o	f HIV info	ection		
The main stages of the HIV pandemic spread.	4			2		2
Current epidemiological situation of HIV infection						
in the world and Ukraine						
Mechanisms and modes of HIV transmission. Risk	4			2		2
groups for HIV infection. Transmission of HIV						
infection from mother to child						
HIV structure, its replication cycle	4			2		2
Environmental persistence of HIV. Degrees of	2					2
exposure risk to the infection						
Natural course of HIV infection	4			2		2
HIV and human immune system	2					2
Modern classification of HIV stages. Main	4			2		2
symptoms and syndromes						
The notion of opportunistic infections. HIV-	4			2		2
associated infections and diseases						
Clinical and epidemiological criteria for the	4			2		2
diagnosis						
Total by content module 1	32			14		18
Cont	ent mod	dule 2				
Features of laboratory	v <mark>diagn</mark> o	osis of H	IV infection	n		
Principles and methods of the HIV laboratory	4			2		2
diagnostics: ELISA, immunoblot,						
immunochromatographic assay						
Peculiarities of express testing. The quick testing	4			2		2
procedure						
Errors in the express testing procedure and results	2					2
interpretation						
Molecular genetic tests. Flow cytometry technique	4			2		2
	2					2
Reviewing and verifying the obtained results	2					2
	4			2		
HIV public testing. Order of the Ministry of Health	4			2		2
of Ukraine No 415 "On improvement of voluntary						
counselling and testing for HIV infection"						2
The concept of HIV screening, its objectives (On	2					2
December 31, 2021, the Ministry of Health of						
Ukraine updated Order No. 794 "On improving the						
quality management system of laboratory studies in						
the field of confronting HIV infection/AIDS"						
considering the updated WHO recommendations)	22			0		1 /
Total by content module 2	22	 		8		14
L Cont	ent moo	aule 3				

						9
Features of HIV co	unselin	g and Al	RT therap)y		
Algorithm of pre-test counseling	2					2
Peculiarities of post-test counseling with negative or	2					2
positive HIV test						
Counseling of various population groups (pregnant	2					2
women, injection drugs users, sex industry						
representatives, health personnel, etc.)						
Highly active antiretroviral therapy (HAART) – the	4			2		2
notion, main groups of drugs, goals and principles of						
its prescription						
АРТ: міжлікарська взаємодія та найбільш	2					2
поширені побічні ефекти						
Total by content module 3	12			2		10
Cont	ent mo	lule 4				
HIV prevention, legal and social aspects of	f provid	ling med	ical care t	to people liv	ving with	HIV
Prevention as a key measure in confronting HIV				2		2
infection. Main rules of the exposure prevention	4					
UNAIDS Strategy "Accelerating the end of the						2
HIV/AIDS epidemic by 2030". 95–95–95 testing	2					
and treatment targets						
Understanding personal and professional risks of	2					2
HIV infection	Z					
Actions of health personnel in an accident	2					2
Indications for post-exposure prophylaxis	2					2
Regulations and legislation on the health care for				2		2
HIV-infected persons. Rights and responsibilities of						
HIV-infected individuals. Compliance with practices	4					
in security and confidentiality of HIV/AIDS						
patients' information						
The notions of stigma and discrimination. Verbal						2
and non-verbal manifestations of stigma. Types of						
stigmas. Causes of stigmatization and	2					
discrimination. Ways of coping. The concept of						
tolerance						
Providing palliative care to people living with HIV:						2
concept, objectives, principles	2					
Public movement and organizations. The role of a				2		2
social service specialist in assistance to people living	4					
with HIV						
Total by content module 4	24	[6		18
		0	0		0	
РАЗОМ	90	0	0	30	0	60

5. Topics of lectures / seminars / practicals / labs

5.1. Topics of lectures

Lectures are not provided

5.2. Topics of seminars

Seminar sessions are not provided

5.3. Topics of practical sessions

No	Торіс	10 Hours
1	Topic 1. The main stages of the HIV pandemic spread. Current epidemiological situation of HIV infection in the world and Ukraine.	2
2	Topic 2. Mechanisms and modes of HIV transmission. Risk groups for HIV infection.Transmission of HIV infection from mother to child.	2
3	Topic 3. HIV structure, its replication cycle.	2
4	Topic 5. Natural course of HIV infection.	2
5	Topic 7. Modern classification of HIV stages. Main symptoms and syndromes.	2
6	Topic 8. The notion of opportunistic infections. HIV-associated infections and diseases.	2
7	Topic 9. Clinical and epidemiological criteria for the diagnosis.	2
8	Topic 10. Principles and methods of the HIV laboratory diagnostics: ELISA, immunoblot, immunochromatographic assay.	2
9	Topic 11. Peculiarities of express testing. The quick testing procedure.	2
10	Topic 13. Molecular genetic tests. Flow cytometry technique.	2
11	Topic 15. HIV public testing. Order of the Ministry of Health of Ukraine No 415 "On improvement of voluntary counselling and testing for HIV infection".	2
12	Topic 20. Highly active antiretroviral therapy (HAART) – the notion, main groups of drugs, go and principles of its prescription.	2
13	Topic 22. Prevention as a key measure in confronting HIV infection. Main rules of the exposure prevention.	2
14	Topic 27. Regulations and legislation on the health care for HIV-infected persons. Rights and responsibilities of HIV-infected individuals. Compliance with practices in security and confidentiality of HIV/AIDS patients' information.	2
15	Topic 30. Public movement and organizations. The role of a social service specialist in assistant to people living with HIV.	2
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5.4. Topics of laboratory sessions Laboratory sessions are not provided

6. Acquirers' self-study activities

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No	Topic	Hours
1	Topic 1. Preparation to the practical session No 1 on the topic "The main stages of the HIV pandemic spread. Current epidemiological situation of HIV infection in the world and Ukraine"	2
2	Topic 2. Preparation to the practical session No 2 on the topic "Mechanisms and modes of HIV transmission. Risk groups for HIV infection. Transmission of HIV infection from mother to child"	2
3	Topic 3. Preparation to the practical session No 3 on the topic "HIV structure, its replication cycle"	2
4	Topic 4. Self-study of the topic "Environmental persistence of HIV. Degrees of exposure risk to the infection"	2
5	Topic 5. Preparation to the practical session No 4 on the topic "Natural course of HIV infection"	2
6	Topic 6. Self-study of the topic "HIV and human immune system"	2

	TOTAL	60
	organizations. The role of a social service specialist in assistance to people living with HIV"	
30	Topic 30. Preparation to the practical session No 15 on the topic "Public movement and	2
29	Topic 29. Self-study of the topic "Providing palliative care to people living with HIV: concept, objectives, principles"	2
28	Topic 28. Self-study of the topic "The notions of stigma and discrimination. Verbal and non- verbal manifestations of stigma. Types of stigmas. Causes of stigmatization and discrimination. Ways of coping. The concept of tolerance"	2
	the health care for HIV-infected persons. Rights and responsibilities of HIV-infected individuals. Compliance with practices in security and confidentiality of HIV/AIDS patients' information"	
26 27	Topic 26. Self-study of the topic "Indications for post-exposure prophylaxis"Topic 27. Preparation to the practical session No 14 on the topic "Regulations and legislation on	2
25 26	Topic 25. Self-study of the topic "Actions of health personnel in an accident" Topic 26. Self study of the topic "Indications for post exposure prophylexie"	2
24	Topic 24. Self-study of the topic "Understanding personal and professional risks of HIV infection"	2
23	Topic 23. Self-study of the topic "UNAIDS Strategy "Accelerating the end of the HIV/AIDS epidemic by 2030". 95–95–95 testing and treatment targets"	2
22	Topic 22. Preparation to the practical session No 13 on the topic "Prevention as a key measure in confronting HIV infection. Main rules of the exposure prevention"	2
21	Topic 21. Self-study of the topic "HAART: drug interactions and most common side effects"	2
20	Topic 20. Preparation to the practical session No 12 on the topic "Highly active antiretroviral therapy (HAART) – the notion, main groups of drugs, goals and principles of its prescription"	2
19	Topic 19. Self-study of the topic "Counseling of various population groups (pregnant women, injection drugs users, sex industry representatives, health personnel, etc.)"	2
18	Topic 18. Self-study of the topic "Peculiarities of post-test counseling with negative or positive HIV test"	2
17	Topic 17. Self-study of the topic "Algorithm of pre-test counseling"	2
10	31, 2021, the Ministry of Health of Ukraine updated Order No. 794 "On improving the quality management system of laboratory studies in the field of confronting HIV infection/AIDS" considering the updated WHO recommendations)"	۷.
15 16	 Topic 15. Preparation to the practical session No 11 on the topic "HIV public testing. Order of the Ministry of Health of Ukraine No 415 'On improvement of voluntary counselling and testing for HIV infection'" Topic 16. Self-study of the topic "The concept of HIV screening, its objectives (On December 	2
14	Topic 14. Self-study of the topic "Reviewing and verifying the obtained results"	2
	cytometry technique"	
12	Topic 12. Self-study of the topic "Errors in the express testing procedure and results interpretation"Topic 13. Preparation to the practical session No 10 on the topic "Molecular genetic tests. Flow	2
11 12	Topic 11. Preparation to the practical session No 9 on the topic "Peculiarities of express testing. The quick testing procedure"	2
10	Topic 10. Preparation to the practical session No 8 on the topic "Principles and methods of the HIV laboratory diagnostics: ELISA, immunoblot, immunochromatographic assay"	2
9	Topic 9. Preparation to the practical session No 7 on the topic "Clinical and epidemiological criteria for the diagnosis"	2
8	Topic 8. Preparation to the practical session No 6 on the topic "The notion of opportunistic infections. HIV-associated infections and diseases"	2
7	Topic 7. Preparation to the practical session No 5 on the topic "Modern classification of HIV stages. Main symptoms and syndromes"	2
7	Tonic 7 Preparation to the practical session No 5 on the tonic "Modern classification of HIV	11

7. 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 monitoring of the success of saquaiers' learning is carried out during practical training on the basis of theoretical knowledge and practical skills and abilities, for which the following forms of control are used

- oral survey;

- blitz survey;

- control of practical skills (work at the patient's bedside) - control by the teacher, self-control;

- control of solving a situational clinical problem with a diagnosis, its justification and answers to questions at the end of the class (written control);

- oral/written answers to questions on SRS topics in accordance with the calendar and thematic plan;

- assessment of activity in the classroom.

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 according to the statistical method.

Final control: credit.

Evaluation of current learning activities in a practical / seminar / laboratory class:

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

- methods: a) survey, b) oral/written answers, c) 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 evaluation of laboratory and instrumental studies, c) compliance with the algorithm of differential diagnosis, d) justification of the clinical diagnosis, e) preparation of a treatment plan.

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

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	The acquirer does not have sufficient knowledge of the material, is unsure of participating in the			
«3»	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	The acquirer does not possess the material, does not participate in the discussion and solution of the			
«2»	situational clinical problem, does not demonstrate practical skills during the examination of the patient			
	and the interpretation of clinical, laboratory and instrumental research data.			

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Credit is awarded to an applicant who has completed all the tasks of the work program of the discipline, actively

participated in practical classes, completed and defended an individual assignment and has a current average grade of at least 3.0 and has no academic debt.

The test is taken: at the last lesson before the start of the examination session - in the case of the tape system of education, at the last lesson - in the case of the cycle system of education. The grade for the test is the arithmetic average of all components on a traditional four-point scale and has a value that is rounded according to the statistical method with two decimal places.

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

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

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:

the sum of points on the ECTS scale				
ECTS mark	Statistic index			
"A"	Next 10% of acquirers			
"B"	Next 25% of acquirers			
"С"	Next 30% of acquirers			
"D"	Next 25% of acquirers			
"E"	Next 10% of acquirers			

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

10. Methodological back-up

- The course's work program;
- The syllabus;
- Methodical manuals to practical sessions;
- Guidelines to acquirers' self-studies;
- Multimedia presentations;
- Case study assignments;
- Cases of laboratory studies results
- Role-play scenarios

11. Topics for preparation to final control

- 1. Current epidemiological situation of HIV infection in the world and Ukraine.
- 2. Mechanisms and modes of HIV transmission.
- 3. Risk groups for HIV infection.
- 4. Transmission of HIV infection from mother to child.
- 5. HIV structure.
- 6. HIV replication cycle.
- 7. Natural course of HIV infection.
- 8. Inreaction peculiarities of HIV and human immune system.
- 9. Modern classification of HIV stages.
- 10. Main symptoms and syndromes in HIV infection.
- 11. The notion of opportunistic infections.
- 12. HIV-associated infections and diseases.
- 13. Principles and methods of the HIV laboratory diagnostics.
- 14. Peculiarities of express testing.
- 15. Indications for HIV testing.
- 16. Peculiarities of pre- and post-test counseling.
- 17. Peculiarities of HIV testing in different population groups.
- 18. HIV testing peculiarities of health personnel.
- 19. HIV testing peculiarities of pregnant women.
- 20. HIV testing peculiarities of police and rescue services employees.
- 21. Collective HIV testing peculiarities.
- 22. Peculiarities of HIV testing injection drugs users.
- 23. Peculiarities of HIV testing of sex industry workers.
- 24. Highly active antiretroviral therapy (HAART), its key goals.
- 25. Groups of medications in HAART.
- 26. What does 95-95-95 mean?
- 27. HIV prevention strategies.
- 28. HIV urgent prevention.
- 29. Healthcare provision for HIV-infected persons under the legislation.
- 30. Rights and responsibilities of HIV-infected individuals.
- 31. Compliance with practices in security and confidentiality of HIV/AIDS patients' information

12. Recommended literature

Basic:

- Infectious Diseases: textbook (IV a. l.) / O.A. Holubovska, M.A. Andreichyn, A.V. Shkurba, T.V. Chaban et al. K. BCB «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.
- Інфекційні хвороби: Підручник / Є.В. Нікітін, М.А. Андрейчин, К.Л. Сервецький, В.О. Качор, А.М. Головченко, Є.М. Усиченко: За ред. Є.В. Нікітіна та М.А. Андрейчина. Тернопіль: Укрмедкнига, 2004. 364 с. ISBN 966-673-012-Х
- Pediatric Infectious Diseases: textbook / S.O. Kramarov, O.B. Nadraga, L.V. Pypa et al.; edited by S.O. Kramarov, O.B. Nadraga. — 4th edition. — Kyiv: AUS Medicine Publishing, 2020. — 240 p.
- 4. General epidemiology: study guide (IV a. l.) / N.O. Vynograd. 3rd edition, corrected K: BCB «Медицина», 2017. 128 с.
- Hagberg H., Wennerholm U.B., Savman K. // Current Opinion in Infection Diseaie». 2015. Vol. - № 3. - P. 301-306.
- 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.

Additional

1. Comprehensive Textbook of Infectious Disease: M. I. Sahadulla, S. A. Udman. – 2rd 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.

13. Online sources

- https://library.odmu.edu.ua/catalog/ Electronic catalogue of the ONMedU library
- http://moz.gov.ua Ministry of Health of Ukraine
- www.ama-assn.org American Medical Association
- www.who.int World Health Organisation
- www.dec.gov.ua/mtd/home/ The State Expert Center of the Ministry of Health of Ukraine
- http://bma.org.uk British Medical Association
- www.gmc-uk.org General Medical Council (GMC)
- www.bundesaerztekammer.de German Medical Association