MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE

V.N. KARAZIN KHARKIV NATIONAL UNIVERSITY

SCHOOL OF MEDICINE

Department of general and clinical immunology and allergology

"APPROVED"
Vice-President for Research and Education
_____A.V. Panteleimonov
"_____"_____2020year

WORKING PROGRAM
Discipline: "Internal medicine", including "Infectious diseases and phthisiology"

module "MANAGEMENT OF PATIENTS WITH TUBERCULOSIS, INFECTIOUS DISEASES AND HIV INFECTION"

Educational qualification: "Specialist"
Branch of learning 22 "Health care"
Training direction 222 "Medicine"
Professional qualification: "Doctor"
obligatory discipline

2020/2021 year of studies

Working program of the discipline «Internal medicine with Infectious diseases and phthisiology» is recommended for approval by the Academic Council of the School of medicine

«13»_____05_____2020year, protocol №9

Working program of the discipline «Internal medicine with Infectious diseases and phthisiology» for applicants for educational qualification "Specialist" professional qualification "Doctor" branch of learning 22 "Health care" specialty 222 "Medicine". V.N. Karazin Kharkiv National University, School of medicine . «13»_____05_____2020year.- 26 p.

Working program of the discipline «Internal medicine with Infectious diseases and phthisiology» for applicants for educational qualification «Specialist» professional qualification «Doctor» branch of learning 22 «Health care» specialty 222 «Medicine» on the school of medicine of V.N. Karazin Kharkiv National University is prepared on the basis of the typical (examplary) program of the discipline, composed by Government institution «Central methodics department for higher medical education of the Ministry of Healthcare of Ukraine» authorized with the Head of the Government institution «Central methodics department for higher medical education of the Ministry of Healthcare of Ukraine» I. Melnik on the 28th of april 2017, authorized with the Acting Head of the Education and Science department of the Ministry of Healthcare of Ukraine N. Oleksina on the 3rd of may 2017 and approved by the Vice-minister of the Ministry of Healthcare of Ukraine O. Linchevskiy on the3rd of may 2017.

Authors of the working program of the discipline ««Internal medicine with Infectious diseases and phthisiology»»:

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Working program was reviewed and approved at a meeting of the Department of general and clinical immunology and allergology of the school of medicine of V.N. Karazin Kharkiv National University, protocol №10 «04»_____05_____2020year.

Head of Department _____Doctor of Sciences (Medicine), T.I. Liadova
"04"_____05_____2020year

The program is agreed with the guarantor of the educational (professional / scientific) program (project team leader)_____«Medicine»_____
name of the educational program

Guarantor of educational (professional / scientific) program
(project team leader)___full professor___Chernuskyi V.G._____

_____ _____
(Signature) (last name and first name)

Working program was reviewed and approved at a meeting of the Methodical committee of the school of medicine of V.N. Karazin Kharkiv National University, protocol № 9 «06» 05 2020 year.

Head of the Methodical committee_____Candidate of Medicine, Associate Professor,

"06" 05 2020 year

O.L. Govalenkova

I. EDUCATIONAL DISCIPLINE DESCRIPTION

Working program of the discipline «Internal medicine with Infectious diseases and phthisiology» for applicants for educational qualification «Specialist» professional qualification «Doctor» branch of learning 22 «Health care» specialty 222 «Medicine» on the school of medicine of V.N. Karazin Kharkiv National University is prepared on the basis of the typical (examplary) program of the discipline, composed by Government institution «Central methodics department for higher medical education of the Ministry of Healthcare of Ukraine» authorized with the Head of the Government institution «Central methodics department for higher medical education of the Ministry of Healthcare of Ukraine» I. Melnik on the 28th of april 2017, authorized with the Acting Head of the Education and Science department of the Ministry of Healthcare of Ukraine N.Oleksina on the 3rd of may 2017 and approved by the Vice-minister of the Ministry of Healthcare of Ukraine O.Linchevskiy on the 3rd of may 2017.

Working program of the discipline «Internal medicine with Infectious diseases and phthisiology» is prepared according to the Project of a Standard of the higher medical education of Ukraine of the second (master's) program branch of learning 22 «Health care» specialty 222 «Medicine» for applicants for educational qualification «Specialist», professional qualification «Doctor», discussed at the XIII All-Ukrainian research and practical conference with an international participation "Topical issues of quality of medical education" (12-13 of may 2016 year, Ternopil, Ukraine), and an approximate educational planfor applicants for educational qualification «Specialist» professional qualification «Doctor» branch of learning 22 «Health care» specialty 222 «Medicine», approved by the Acting Minister of Healthcare of Ukraine V. Shafranskiy on the 26th of july 2016, taking into account conditions of the Protocol for grading the learning activity of applicantss in conditions of an introduction to the the European Credit Transfer System (ECTS)of the organization of the educational process, approved by the Ministry of Healthcare of Ukraine on the 15th of april 2014 year; Act of Ukraine «On higher education» № 2443-VIII from the 22nd o may 2018; Statute of the organization of the educational process in V.N. Karazin Kharkiv National University, approved on the meeting of the Academic Board of the University (protocol of the meeting №5 from the 27th of march 2017), and put into action by the order of the President of the University (order № 0202-1/155 from the 21st of april 2017) in the revised version from the 5th of September 2018; educational plan of training for applicants for educational qualification «Specialist» professional qualification «Doctor» branch of learning 22 «Health care» specialty 222 «Medicine» on the medical faculty, approved by the Academic Board and put into action by the order of the President of V.N. Karazin Kharkiv National University, Educational and professional program of the higher education training for applicants for educational qualification «Specialist» professional qualification «Doctor» branch of learning 22 «Health care» specialty 222 «Medicine» on the medical faculty, approved by the Academic Board of V.N. Karazin Kharkiv National University (protocol № 13 from 31st of October 2016); the Statute of V.N. Karazin Kharkiv National University, approved by the order of the Ministry of Education and Science of Ukraine (order №644 from 13th of june 2018); The codex of values of V.N. Karazin Kharkiv National University and other regulatory acts.

The duration of studies of the discipline «Internal medicine with Infectious diseases and phthisiology» is 2 semesters (IX and X) during the 6th academic year. Total amount of academic hours for discipline «Internal medicine with Infectious diseases and phthisiology» is 60 hours (2 credits ECTS), which of them 30 hours – practical classes, 30 hours – independent work of applicants for higher education (IW) for the discipline "Infectious diseases" . For the discipline "Phthisiology" is 30 hours (1 credits ECTS), which of them 12 hours – practical classes, 18 hours – independent work of applicants for higher education (IW) .

Structure of hours for studies of the discipline «Internal medicine with Infectious diseases and phthisiology» is in the table below (tabl. 1).

The discipline «Internal Medicine with Infectious Diseases and Phthisiology» as a discipline is based on the study by applicants for higher medical education of medical and biological physics, morphological disciplines, microbiology, virology and immunology, physiology, pathophysiology, internal medicine, surgery, neurology, dermatology,epidemiology, ophthalmology, otolaryngology, endocrinology, clinical pharmacology, resuscitation and integrates with these disciplines; lays the foundations for applicants for the higher medical education to integrate stadying of this discipline and to develop the ability to apply knowledge of infectious diseases in further learning and professional work; lays the foundations for a healthy lifestyle and prevention of impaired body functions in the process of life. In the general system of the doctor training the discipline «Internal medicine with Infectious diseases and phthisiology» occupies an important place in view of the significant prevalence of infectious pathology, the need for future physician to develop clinical thinking, proficiency and practical skills that will ensure timely diagnosis of infectious diseases and their complications, rational treatment, the choice of optimal tactics in the case of emergency care. Special attention is given to questions of early diagnosis and treatment of patients at the the pre-hospital stage, which contributes to improving the quality of physician training, especially for the outpatient health care unit.

The organization of the educational process in studying the discipline «Internal medicine with Infectious diseases and phthisiology»is provided with European Credit Transfer System.

The main types of educational work in the process of the discipline «Internal medicine with Infectious diseases and phthisiology» studying are practical classes, independent work, consulting according to the schedule, which is approved at the beginning of each academic year at the meeting of the Department of general and clinical immunology and allergology (additionally in case of need consultations are held using Internet technologies, distance learning technologies, webinars, conferences, research works etc.). The topics of the lectures of the discipline «Internal medicine with Infectious diseases and phthisiology» reveal the problematic issues of the relevant sections of the discipline and allow applicants for higher medical education to receive information on the most relevant issues of the discipline. Classes in the course of «Internal medicine with Infectious diseases and phthisiology» according to the method of their organization are practical classes, where videos, movies shown with the help of computer software and other educational technologies can be used; solving of situational tasks (laboratory diagnostics of infectious diseases, assessment of indexes of immunity, statistics, analytical methods) that have experimental, clinical and diagnostic or sanitary-hygienic direction. In practical classes applicants for higher medical education receive recommendations to briefly record the research protocols, which should indicate the purpose of the study, the results of the study, and conclusions.

The general amount of stadying load is described in ECTS credits, which are scored to applicants for higher medical education in case of successful learning the exact module (final credit). The European Credit Transfer System encourages applicants for higher medical education to study systematically during the studying year when learning the discipline.

The Academic Council of the School of medicine on the demand of the department of General and clinical immunology and allergology can change the amount of hours of the discipline «Internal Medicine with Infectious Diseases and Phthisiology», but not more than 10% of their amount. The department of General and clinical immunology and allergology has a right to make some changes in the working program according to its organizational and technical possibilities, the direction of research works, ecological peculiarities of the region, but general demands of the discipline and educational plans must be considered. Current program totally satisfy requirements of demands mentioned above.

Current educational work of applicants for higher medical education is controlled on the practical classes according to specific goals. To estimate the level of knowledge of applicants for higher medical education it is recommended to use such methods as tests, written or oral answers on control questions, solving situational tasks, providing laboratory examinations, results of laboratory analyses, controlling the mastering practical skills by applicants for higher medical education. The final module control is carried out at the end of the study of modules.

The program of the discipline is structured on 1 ECTS module for the discipline "Infectious Diseases and HIV Infection" which includes 5 sections and 1 module for the discipline «Phthisiology».

Types of training sessions during the course "Infectious Diseases and Phthisiology» according to the curriculum are practical classes and independent work of applicants for higher education (IW).Practical classes according to the method of their organization are clinical, include demonstration of thematic patients, but provide the maximum use of various didactic means - multimedia presentations, educational videos, slides, audio recordings. Management of patients with infectious diseases is carried out according to the algorithm of actions of applicants of higher education.

Independent work of applicants for higher education (IW) occupies an important place in the study of the course. In addition to the traditional preparation of higher education applicants for practical classes and credit and mastering the list of topics that belong to self-study, it includes work by applicants in the hospital in extracurricular time with practical skills, development of schemes for differential diagnosis and examination algorithms. The effectiveness of IW should be ensured through the cooperation of higher education applicants and teachers.

It is recommended to use the following diagnostic tools for the level of training of applicants: blank testing, solving situational problems, interpretation of laboratory tests, analysis and evaluation of specific and instrumental methods of examination, control of practical skills, answers to standardized theoretical questions.Assessment of success of the applicant in the discipline is a rating and is set on a multi-point scale as the arithmetic mean of the mastery of the relevant modules and is determined by the ECT system and the scale adopted in Ukraine.

In more detail the technique of an estimation of current educational activity and results of delivery of modular control is described in the corresponding section of the current work program (see below).

Table 1

CURRICULUM FOR THE DISCIPLINE «INTERNAL MEDICINE WITH INFECTIOUS DISEASES AND PHTHISIOLOGY» FOR APPLICANTS FOR HIGHER EDUCATION SCHOOL OF MEDICINE V.N. KARAZIN KHARKIV NATIONAL UNIVERSITY

Stucture of the discipline	Hours				Credits ECTS	Year and semester of studies	Type of control
	Lectures	Practical classes	IW	total			
Module 1 "MANAGEMENT OF PATIENTS WITH INFECTIOUS DISEASES AND HIV INFECTION"	-	30	30	60	2	6 year, XI semester	current control
Module 2 «MANAGEMENT OF PATIENTS WITH TUBERCULOSIS»	-	12	18	30	1	6 year, XII semester	current control
TOTAL	**-**	**42**	**48**	**90**	**3**		

Note: 1 credit ECTS – 30 academic hours; teaching load – 50%; IW – 50% (for the discipline "Infectious diseases"); teaching load –40%; IW – 60% (for the discipline "Phthisiology").

1.1. THE PURPOSE OF STUDIES OF THE EDUCATIONAL DISCIPLINE

The purpose of teaching the discipline «Internal Medicine with Infectious Diseases and Phthisiology» is to form a system of basic knowledge on the theory of the mechanism of transmission of infectious diseases practical skills and skills in planning and implementing anti-epidemic and preventive measures in the case of the most common and particularly dangerous infectious diseases and tuberculosis. The ultimate goals are created on the basis of EPP and OKH training of a doctor in the specialty in accordance with the block of its content module (professional and practical training) and is the basis for building the content of the discipline. The description of goals is formulated through skills in the form of target tasks (actions). On the basis of the ultimate goals for the module or content module, **specific goals** are formulated in the form of certain skills (actions), target tasks that ensure the achievement of the ultimate goal of studying the discipline.

1.2. The main tasks of studying the discipline "Infectious Diseases" and " Phthisiology " are:

Applicants for higher education in an infectious disease clinic should be able to:

- Demonstrate mastery of the bioethical and moral-deontological principles of the medical specialist and the principles of professional subordination.
- Be able to ensure the necessary level of individual safety (own and carers) in the event of typical dangerous situations in the individual field of activity.
- To interrogate and physically examine patients with the main symptoms and syndromes in the clinic of infectious diseases.
- Interpret epidemiological data in a specific case.
- To plan and carry out anti-epidemic, sanitary-hygienic and preventive measures on infectious diseases.
- Carry out medical and evacuation measures.
- Keep medical records.
- Establish a preliminary diagnosis of major infectious (including HIV) and parasitic diseases, identify their complications.
- Diagnose emergencies.
- Make a differential diagnosis of the main symptoms and syndromes of infectious diseases.
- To make the plan of inspection of patients and to substantiate application of each noninvasive and invasive method of diagnostics applied in clinic of infectious diseases, to define indications and contraindications for their carrying out, possible complications.
- Evaluate the results of laboratory and instrumental tests.
- Interpret the normative documents of the Ministry of Health of Ukraine regulating the procedure of voluntary testing, hospitalization, treatment, preventive measures, legal aspects regarding HIV infection.
- to make principles of treatment of diseases.
- To determine the necessary mode of work and rest, diet in the treatment of diseases.
- Determine patient management tactics and provide emergency medical care.
- To determine the tactics of contingent contingent of persons subject to dispensary supervision.
- perform medical manipulations.

An applicant for higher education in a tuberculosis clinic should be able to:

- Conduct a survey and physical examination of patients with the main symptoms and syndromes in a tuberculosis clinic.

- Make a preliminary diagnosis of tuberculosis and identify its complications.
- To make the differential diagnosis at the main symptoms and syndromes in phthisiology practice.
- Make a plan to examine patients and justify the use of each non-invasive and invasive diagnostic method used in tuberculosis.
- Evaluate the results of the main instrumental and laboratory diagnostic methods in tuberculosis practice.
- Make a clinical diagnosis.
- Determine the prognosis of patients with tuberculosis.
- Prescribe non-drug and drug treatment, including prognosis-modifying, to carry out non-drug and drug primary and secondary prevention of tuberculosis.
- To determine the tactics of contingent of persons subject to dispensary observation in tuberculosis practice.
- Provide emergency medical care for pulmonary hemorrhage and spontaneous pneumothorax.
- Demonstrate mastery of the moral and deontological principles of a medical professional and the principles of professional subordination.

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

In accordance with the requirements of the standard, the discipline provides the acquisition of higher education competencies:

- *integral:*

Ability to solve typical and complex specialized problems and practical problems in a professional health care activity, or in a learning process that involves research and / or innovation and is characterized by the complexity and uncertainty of conditions and requirements.

- *general:*

Ability to apply knowledge in practical situations.

Ability to exercise self-regulation, lead a healthy lifestyle, ability to adapt and act in a new situation.

Ability to choose a communication strategy; ability to work in a team; interpersonal skills.

Skills in the use of information and communication technologies.

Ability to abstract thinking, analysis and synthesis, the ability to learn and be modernly trained.

Definiteness and perseverance in terms of tasks and responsibilities.

Ability to act socially responsible and public consciousness.

The desire to preserve the environment.

- special (professional, subject):

Ability to carry out medical and evacuation measures.

Ability to carry out sanitary and hygienic and preventive measures.

Ability to plan preventive and anti-epidemic measures for infectious diseases.

Ability to carry out preventive and anti-epidemic measures against infectious diseases.

Ability to process state, social, economic and medical information.

Ability to conduct epidemiological and medical-statistical studies of public health.

Ability to assess the impact of the environment on the health of the population (individual, family, population).

Ability to assess the impact of socio-economic and biological determinants on the health of the individual, family, population.

1.3. NUMBER OF CREDITS

The discipline program «Internal medicine with Infectious diseases and phthisiology» is 2 semesters (IX and X) during the 6-th academic year. Total amount of academic hours for discipline «Internal medicine with Infectious diseases and phthisiology» is 60 hours (2 credits ECTS), which of them 30 hours – practical classes, 30 hours – independent work of applicants for higher education (IW) for the discipline «Infectious diseases». For the discipline «Phthisiology» is 30 hours (1 credits ECTS), which of them 12 hours – practical classes, 18 hours – independent work of applicants for higher education (IW) .The educational process is organized according to the credit-module system in accordance with the implementation of the provisions of the Bologna Declaration in the higher medical education system.

1.4. TOTAL AMOUNT OF HOURS

Table 2.1

1.5. Characteristic of the academic discipline «Infectious diseases»	
Obligatory	
Full-time education	
Year of training	
6-th	
semester	
XI	
lectures	
-	
Practical, seminar classes	
30 hours	
Laboratory classes	
–	
Independent work	
30 hours	
including individual tasks	

Table 2.2

1.5. Characteristic of the academic discipline "Phthisiology"	
Obligatory	
Full-time education	
Year of training	
6-th	
semester	
XII	
lectures	
-	
Practical, seminar classes	
12 hours	
Laboratory classes	
–	
Independent work	
18 hours	
including individual tasks	

1.6. PLANNED LEARNING RESULTS

The final goals of the discipline

- SP.028. To identify the main clinical symptoms that form a typical syndrome of the most common infectious diseases;
- SP.042. To make a preliminary diagnosis of the most common infectious diseases (syndrome and etiological);
- SP.046. To make a preliminary clinical diagnosis, to plan preventive and quarantine measures for the most common and especially dangerous diseases;
- SP.033. To interpret patterns and specific features of pathological and epidemiological process in different infectious diseases;
- SP.066. To carry out clinical and laboratory differential diagnosis of various infectious diseases and infectious diseases with non-infectious ones;
- SP.067. To interpret the results of specific methods of examination in the presence of combined pathology – infectious and non-infectious;
- SP.025. To determine the tactics of treatment of patients with the most common infectious diseases;
- SP.026. To determine the tactics of hospitalization and isolation of infectious patients;
- SP.063. To diagnose medical emergencies and provide pre-hospital care;
- SP.031. To demonstrate awareness of infectious diseases as a mass destruction weapon;
- SP.082. To predict the effects of infectious diseases on human health.
- SP.059. To demonstrate the ability to maintain medical records in an infectious disease clinic.

II. THEMATIC PLAN OF EDUCATIONAL DISCIPLINE

The working program for applicants for higher medical education of the discipline "Infectious diseases" is structured as a single module, which consists of 5 content modules, the study of materials of each allows applicants for higher medical education to fully learn the theoretical part and master practical skills of a separate section of the discipline. The form of discipline control is the control with the help of final module. The Credit-Module Organization of the Educational Process Organization (CISPS) encourages applicants for higher medical education to study systematically throughout the academic year and should improve the quality of applicant training.

The types of training according to the curriculum are lectures, practical classes, independent work (IW).

The topics of the lectures reveal the problematic issues of the relevant sections of the infectious pathology. During the lectures various didactic tools are used – multimedia presentations, educational movies, slides, tape recorders, demonstration of patients. Lecture and practical stages of the stadying of applicants for higher medical education are formed in such a sequence in which topics of lectures are preceded by practical classes.

According to the methodology of the organization the Practical classes are clinical and include:

1. Examination of patients with infectious diseases, which is carried out according to a algorithm.
2. Consideration of theoretical questions and acquisition of practical skills according to standard lists for each practical session and during the final module control.
3. Analysis of archived medical records.
4. Solving situational tasks.
5. Standardized test control, oral and written questioning.

Independent work (IW) takes a significant place in the study of discipline. In addition to the traditional preparation of applicants for higher medical education for practical classes and module control, as well as mastering the list of topics presented for IW, it includes the work of applicants for higher medical education in the clinic in the extra-curricular time with mastering practical skills, drawing up differential diagnosis schemes and algorithms for patients examination, preparing medical records. The effectiveness of the IW should be provided by the collaboration of applicants for higher medical education and teachers.

CONTENT MODULE «MANAGEMENT OF PATIENTS WITH INFECTIOUS DISEASES AND HIV INFECTION»

Current issues in the diagnosis and treatment of infectious diseases

Specific goals:

- Demonstrate mastery of the bioethical and moral-deontological principles of the medical specialist and the principles of professional subordination.
- Be able to ensure the necessary level of individual safety (own and carers) in the event of typical dangerous situations in the individual field of activity.
- To interrogate and physically examine patients with the main symptoms and syndromes in the clinic of infectious diseases.
- Interpret epidemiological data in a specific case.
- To plan and carry out anti-epidemic, sanitary-hygienic and preventive measures on infectious diseases.
- Carry out medical and evacuation measures.
- Keep medical records.
- Establish a preliminary diagnosis of major infectious (including HIV) and parasitic diseases, identify their complications.
- Diagnose emergencies.
- Make a differential diagnosis of the main symptoms and syndromes of infectious diseases.
- To make the plan of inspection of patients and to substantiate application of each noninvasive and invasive method of diagnostics applied in clinic of infectious diseases, to define indications and contraindications for their carrying out, possible complications.
- Evaluate the results of laboratory and instrumental tests.
- Interpret the normative documents of the Ministry of Health of Ukraine regulating the procedure of voluntary testing, hospitalization, treatment, preventive measures, legal aspects regarding HIV infection.
- to make principles of treatment of diseases.
- To determine the necessary mode of work and rest, diet in the treatment of diseases.
- Determine patient management tactics and provide emergency medical care.
- To determine the tactics of contingent contingent of persons subject to dispensary supervision.
- perform medical manipulations.

Topic 1. Management of a patient with fever syndrome including prolonged fever of unknown origin in the clinic of infectious diseases. Management of a patient with infectious diseases with airborne transmission mechanism.

Differential diagnosis of typhoid fever and paratyphoid fever, malaria, HIV infection, brucellosis, typhus and Brill-Zinsser disease, Ebola fever. Algorithm for examination of patients. Principles of assistance, including urgent, at the prehospital stage. Sepsis, differential diagnosis, principles of treatment. Differential diagnosis of acute respiratory diseases: influenza,

parainfluenza, adenoviral, meningococcal infection, diphtheria, EBV / CMV-infectious mononucleosis, "childhood" infections (measles, rubella, chickenpox, mumps,) with acute and chronic diseases. Emergencies and their treatment (false croup, acute respiratory failure, pulmonary edema, Acute respiratory distress syndrome in adults) in infectious diseases of the respiratory tract.

Topic 2. Management of a patient with liver disease of infectious and non-infectious origin.

Differential diagnosis between viral hepatitis (HAV, HEV, HBV, HCV, HDV) and liver lesions of other origin: infectious (malaria, EBV / CMV infections, leptospirosis) and non-infectious - hereditary (enzymopathy, hemoglobinopathies) alcohol, drugs - sulfonamides, quinine, etc.) and other disorders - obstruction, narrowing, compression, atresia of the bile ducts), etc. Fulminant course of viral hepatitis. Acute hepatic encephalopathy, emergency care in the prehospital stage.

Topic 3. Management of a patient with HIV / AIDS, differential diagnosis of lymphadenopathy. Management of a patient with HIV-indicative infection.

Clinical diagnosis of the acute phase of HIV infection, criteria for clinical diagnosis. Laboratory diagnosis of HIV infection, examination plan of the patient in case of a preliminary diagnosis of HIV infection. Laboratory testing in case of suspected HIV (pre-test and post-test counseling). The role of psychological support. Principles of appointment of HAART. Clinical examination of patients with HIV infection. General and individual prevention of HIV infection. Universal safety measures and organization of the doctor's work in order to prevent HIV infection of medical workers. Safety precautions for invasive manipulations. Measures in case of contamination with infectious material in the workplace. Differential diagnosis of diseases associated with the syndrome of lymphadenopathy (plague, anthrax, infectious mononucleosis, HIV infection.)

The most common HIV-associated infectious diseases: herpesvirus, protozoal (cerebral toxoplasmosis, cryptosporidiosis, isosporosis), fungal (candidiasis, pneumocystis pneumonia, cryptococcosis), bacterial etiology (bacterial recurrence, bacterial recurrence, mimic relapse). . Clinical and laboratory diagnostics.

Peculiarities of opportunistic infections in HIV patients. Principles of treatment and prevention of HIV-indicator infections.

Topic 4. Management of a patient with acute and chronic diarrheal syndrome in the clinic of infectious diseases.

Differential diagnosis between food poisoning, botulism, salmonellosis, cholera, shigellosis, amebiasis with food poisoning and acute and chronic diseases of the digestive system. Diagnosis, differential diagnosis and treatment of emergencies in acute intestinal infections in the clinic and at the prehospital stage: dehydration shock, intestinal bleeding.

Topic 5. Organization and conduct of emergency care and intensive care

Basic clinical and pathogenetic syndromes and methods of intensive care. Algorithms for providing emergency care. Hyperthermic, convulsive syndromes. Infectious and toxic shock. Thrombo-hemorrhagic syndrome. Acute adrenal insufficiency. Hypovolemic shock. Intestinal bleeding. Swelling-swelling of the brain. Differential diagnosis of comatose states. Respiratory, cardiovascular insufficiency, pulmonary edema. Hepatic insufficiency. Features of diagnosis and treatment of fulminant forms of viral hepatitis. Hepato-renal syndrome. Renal failure. Anaphylactic shock, complications of serotherapy (serum sickness).

Final modular control.

CONTENT MODULE «MANAGEMENT OF PATIENTS WITH TUBERCULOSIS»

Specific goals:

- Conduct a survey and physical examination of patients with the main symptoms and syndromes in a tuberculosis clinic.
- Make a preliminary diagnosis of tuberculosis and identify its complications.
- To make the differential diagnosis at the main symptoms and syndromes in phthisiology practice.
- Make a plan to examine patients and justify the use of each non-invasive and invasive diagnostic method used in tuberculosis.
- Evaluate the results of the main instrumental and laboratory diagnostic methods in tuberculosis practice.
- Make a clinical diagnosis.
- Determine the prognosis of patients with tuberculosis.
- Prescribe non-drug and drug treatment, including prognosis-modifying, to carry out non-drug and drug primary and secondary prevention of tuberculosis.
- To determine the tactics of contingent of persons subject to dispensary observation in tuberculosis practice.
- Provide emergency medical care for pulmonary hemorrhage and spontaneous pneumothorax.
- Demonstrate mastery of the moral and deontological principles of a medical professional and the principles of professional subordination.

Topic 1. Management of patients with tuberculosis.

International standards for tuberculosis control, 3rd edition. Modern approaches to the detection and diagnosis of tuberculosis. Implementing a practical approach to lung health. Standardization of clinical care. Coordination within the health sector. Identification of symptoms that may indicate tuberculosis. The route of a patient with a cough at the stage of primary care. The place of laboratory methods in the detection of tuberculosis. Bacterioscopic and bacteriological methods of tuberculosis diagnosis: accelerated methods of MBT detection - VASTEK, Xpert MTB / RIF, genetic laboratory methods - nucleic acid amplification tests (PCR). The role of rapid methods of molecular genetic diagnosis of tuberculosis, in particular Xpert MTB / RIF technology and linear tests (MTBDRPlus). Application of X-ray examination in the diagnosis of tuberculosis. Differential diagnosis of pulmonary dissemination, infiltrative changes, focal and rounded shadows, cavity formations in the lungs. The role of computed tomography and magnetic resonance imaging in the diagnosis and differential diagnosis of pulmonary and extrapulmonary tuberculosis. The role of instrumental and invasive methods in confirming the diagnosis (fibrobronchoscopy with lavage for microscopic and culture examination, transthoracic / transbronchial or open puncture lung biopsy, thoracoscopy with pleural biopsy with exudate collection for microscopic and culture examination). Treatment regimens for patients with newly diagnosed tuberculosis and cases of re-treatment. Treatment under direct supervision and the formation of adherence to treatment. Individual approach to the patient. Infectious control of tuberculosis infection. Secondary prevention of tuberculosis.

Topic 2. Management of patients with chemoresistant tuberculosis.

Determining the risk of multidrug-resistant tuberculosis. Timely establishment of chemoresistance. Compilation of a diagnostic algorithm with the rational use of methods of molecular genetic diagnostics and bacteriological research. Standard and individualized treatment regimens for monoresistant, multidrug-resistant, multidrug-resistant tuberculosis (MDR-TB) and tuberculosis with extended resistance (RRTB). Diagnosis and management of adverse reactions to treatment.

Topic 3. Management of tuberculosis patients in combination with HIV infection.

Features of clinical manifestations of HIV-associated tuberculosis (TB/HIV). Pulmonary and extrapulmonary forms of tuberculosis: tuberculosis of bones, lymph nodes, kidneys, meninges, etc. Screening survey on symptoms that may indicate tuberculosis as a method recognized by the WHO as the most effective in the early diagnosis of tuberculosis among people living with HIV (PLHIV). HIV detection: counseling and testing of TB patients at the initiative of a healthcare professional and voluntary counseling and testing of people with symptoms that may indicate tuberculosis. The role of sputum examination by Xpert MTB/RIF method, X-ray and histological examination in the diagnosis of TB/HIV. Treatment of TB/HIV co-infection: treatment of tuberculosis, treatment of HIV infection. Interaction of antitubercular and antiretroviral drugs. The concept of immune reconstitution syndrome. Chemoprophylaxis of tuberculosis in PLHIV. Introduction of prophylactic therapy with cotrimoxazole for HIV-infected patients with tuberculosis.

III. STRUCTURE OF THE THE DISCIPLINE "INTERNAL MEDICINE WITH INFECTIOUS DISEASES AND "PHTHISIOLOGY"

Table 3.1

Names of modules and topics	Number of hours											
	Full-time						External form					
	total	including					total	including				
		l	p	lab	ind	IW	p	l	p	lab	ind	iw
1	2	3	4	5	6	7	8	9	10	11	12	13
Module "Management of patients with infectious diseases, HIV infection"												
Topic 1. Management of a patient with fever syndrome, including prolonged fever of unknown origin, in the clinic of infectious diseases. Management of a patient with infectious diseases with Topic 1. Management of a patient with fever syndrome, including prolonged fever of unknown origin, in the clinic of infectious diseases. Management of a patient with infectious diseases with airborne transmission mechanism			6			6	-	-	-	-	-	-
Topic 2. Management of a patient with liver disease of infectious and non-infectious origin.			6			6	-	-	-	-	-	-
Topic 3. Management of a patient with HIV / AIDS, differential diagnosis of lymphadenopathy. Management of a patient with HIV-indicative infection.			6			6	-	-	-	-	-	-
Topic 4. Management of a patient with acute and chronic diarrheal syndrome in the clinic of infectious diseases.			6			6	-	-	-	-	-	-
Topic 5. Organization and conduct of emergency care and intensive care.			4			6						
Final control			2									
Total together with the content module	60		30			30						
Module "Management of patients with tuberculosis"												
Topic 1. Management of patients with tuberculosis			4			6						
Topic 2. Management of patients with chemoresistant tuberculosis.			4			6						

Topic 3. Management of patients with tuberculosis in combination with HIV infection.			2			6						
Final control			2									
together with the content module	30		12			18						
Total hours	90		42			48	-	-	-	-	-	-

THEMATIC PLAN OF PRACTICAL CLASSES OF THE DISCIPLINE "INTERNAL MEDICINE WITH INFECTIOUS DISEASES AND "PHTHISIOLOGY"

Table 3.2

No	TOPIC	hours
	Module "Management of patients with infectious diseases, HIV infection"	
1.	*Topic 1. Management of a patient with fever syndrome, including prolonged fever of unknown origin, in the clinic of infectious diseases. Management of a patient with infectious diseases with airborne transmission mechanism.* Differential diagnosis of typhoid fever and paratyphoid fever, malaria, HIV infection, brucellosis, typhus and Brill-Zinsser disease, Ebola fever. Algorithm for examination of patients. Principles of assistance, including urgent, at the prehospital stage. Sepsis, differential diagnosis, principles of treatment. Differential diagnosis of acute respiratory diseases: influenza, parainfluenza, adenoviral, meningococcal infection, diphtheria, EBV / CMV-infectious mononucleosis, "childhood" infections (measles, rubella, chickenpox, mumps,) with acute and chronic diseases. Emergencies and their treatment (false croup, acute respiratory failure, pulmonary edema, acute respiratory distress syndrome in adults) in infectious diseases of the respiratory tract.	6
2.	*Topic 2. Management of a patient with liver disease of infectious and non-infectious origin.* Differential diagnosis between viral hepatitis (HAV, HEV, HBV, HCV, HDV) and liver lesions of other origin: infectious (malaria, EBV / CMV infections, leptospirosis) and non-infectious - hereditary (enzymopathy, hemoglobinopathies) alcohol, drugs - sulfonamides, quinine, etc.) and other disorders - obstruction, narrowing, compression, atresia of the bile ducts), etc. Fulminant course of viral hepatitis. Acute hepatic encephalopathy, emergency care in the prehospital stage.	6
3.	*Topic 3. Management of a patient with HIV / AIDS, differential diagnosis of lymphadenopathy. Management of a patient with HIV-indicative infection.* Clinical diagnosis of the acute phase of HIV infection, criteria for clinical diagnosis. Laboratory diagnosis of HIV infection, examination plan of the patient in case of a preliminary diagnosis of HIV infection. Laboratory testing in case of suspected HIV (pre-test and post-test counseling). The role of psychological support. Principles of appointment of HAART. Clinical examination of patients with HIV infection. General and individual prevention of HIV infection. Universal safety measures and organization of the doctor's work in order to prevent HIV infection of medical workers. Safety precautions for invasive manipulations. Measures in case of contamination with infectious material in the workplace. Differential diagnosis of diseases associated with the syndrome of lymphadenopathy (plague, anthrax, infectious mononucleosis, HIV infection.)	6

	The most common HIV-associated infectious diseases: herpesvirus, protozoal (cerebral toxoplasmosis, cryptosporidiosis, isosporosis), fungal (candidiasis, pneumocystis pneumonia, cryptococcosis), bacterial etiology (bacterial recurrence, bacterial recurrence, mimic relapse). . Clinical and laboratory diagnostics. Peculiarities of opportunistic infections in HIV patients. Principles of treatment and prevention of HIV-indicator infections.	
4.	*Topic 4. Management of a patient with acute and chronic diarrheal syndrome in the clinic of infectious diseases.* Differential diagnosis between food poisoning, botulism, salmonellosis, cholera, shigellosis, amebiasis with food poisoning and acute and chronic diseases of the digestive system. Diagnosis, differential diagnosis and treatment of emergencies in acute intestinal infections in the clinic and at the prehospital stage: dehydration shock, intestinal bleeding.	6
5.	*Topic 5. Organization and conduct of emergency care and intensive care* Basic clinical and pathogenetic syndromes and methods of intensive care. Algorithms for providing emergency care. Hyperthermic, convulsive syndromes. Infectious and toxic shock. Thrombo-hemorrhagic syndrome. Acute adrenal insufficiency. Hypovolemic shock. Intestinal bleeding. Swelling-swelling of the brain. Differential diagnosis of comatose states. Respiratory, cardiovascular insufficiency, pulmonary edema. Hepatic insufficiency. Features of diagnosis and treatment of fulminant forms of viral hepatitis. Hepato-renal syndrome. Renal failure. Anaphylactic shock, complications of serotherapy (serum sickness). Final modular control.	6
Module "Management of patients with tuberculosis"		
1.	*Topic 1. Management of patients with tuberculosis.* International standards for tuberculosis control, 3rd edition. Modern approaches to the detection and diagnosis of tuberculosis. Implementing a practical approach to lung health. Standardization of clinical care. Coordination within the health sector. Identification of symptoms that may indicate tuberculosis. The route of a patient with a cough at the stage of primary care. The place of laboratory methods in the detection of tuberculosis. Bacterioscopic and bacteriological methods of tuberculosis diagnosis: accelerated methods of MBT detection - VASTEK, Xpert MTB / RIF, genetic laboratory methods - nucleic acid amplification tests (PCR). The role of rapid methods of molecular genetic diagnosis of tuberculosis, in particular Xpert MTB / RIF technology and linear tests (MTBDRPlus). Application of X-ray examination in the diagnosis of tuberculosis. Differential diagnosis of pulmonary dissemination, infiltrative changes, focal and rounded shadows, cavity formations in the lungs. The role of computed tomography and magnetic resonance imaging in the diagnosis and differential diagnosis of pulmonary and extrapulmonary tuberculosis. The role of instrumental and invasive methods in confirming the diagnosis (fibrobronchoscopy with lavage for microscopic and culture examination, transthoracic / transbronchial or open puncture lung biopsy, thoracoscopy with pleural biopsy with exudate collection for microscopic and culture examination). Treatment regimens for patients with newly diagnosed tuberculosis and cases of re-treatment. Treatment under direct supervision and the formation of adherence to treatment. Individual approach to the patient.	4

	Infectious control of tuberculosis infection. Secondary prevention of tuberculosis.	
2.	*Topic 2. Management of patients with chemoresistant tuberculosis.* Determining the risk of multidrug-resistant tuberculosis. Timely establishment of chemoresistance. Compilation of a diagnostic algorithm with the rational use of methods of molecular genetic diagnostics and bacteriological research. Standard and individualized treatment regimens for monoresistant, multidrug-resistant, multidrug-resistant tuberculosis (MDR-TB) and tuberculosis with extended resistance (RRTB). Diagnosis and management of adverse reactions to treatment.	4
3.	*Topic 3. Management of tuberculosis patients in combination with HIV infection.* Features of clinical manifestations of HIV-associated tuberculosis (TB/HIV). Pulmonary and extrapulmonary forms of tuberculosis: tuberculosis of bones, lymph nodes, kidneys, meninges, etc. Screening survey on symptoms that may indicate tuberculosis as a method recognized by the WHO as the most effective in the early diagnosis of tuberculosis among people living with HIV (PLHIV). HIV detection: counseling and testing of TB patients at the initiative of a healthcare professional and voluntary counseling and testing of people with symptoms that may indicate tuberculosis. The role of sputum examination by Xpert MTB/RIF method, X-ray and histological examination in the diagnosis of TB/HIV. Treatment of TB/HIV co-infection: treatment of tuberculosis, treatment of HIV infection. Interaction of antitubercular and antiretroviral drugs. The concept of immune reconstitution syndrome. Chemoprophylaxis of tuberculosis in PLHIV. Introduction of prophylactic therapy with cotrimoxazole for HIV-infected patients with tuberculosis. Final modular control.	4
	TOTAL	**42**

V. TOPICAL PLAN OF INDEPENDENT WORK OF APPLICANTS FOR HIGHER MEDICAL EDUCATION IN THE DISCIPLINE "INTERNAL MEDICINE WITH INFECTIOUS DISEASES AND “PHTHISIOLOGY”

Table 3.3

№	**Module "Management of patients with infectious diseases, HIV infection"**	hours
1.	*- Preparation for the practical lesson "Management of a patient with fever syndrome, including prolonged fever of unknown origin, in the clinic of infectious diseases. Management of a patient with infectious diseases with airborne transmission mechanism.* *- Improving the skills of interpretation of microbiological data of various biological fluids.* *- Improving the skills of interpretation of OCP ultrasound data and other instrumental data (radiographs, CT data, MRI).* *- Improving the skills of interpretation of clinical blood test data, cerebrospinal fluid.* *- Improving the skills of interpretation of these specific methods of laboratory tests in the diagnosis of ARI hemagglutination test, compliment binding reaction, ELISA, riminofluorescence, indirect immunofluorescence reaction,*	6

	immunochromatographic test, PCR).	
2.	*- Preparation for the practical lesson "Management of a patient with liver disease of infectious and non-infectious origin".* *- Improving the skills of interpretation of biochemical blood test data (markers of liver damage, protein and lipid spectra of blood) and coagulogram.* *- Improving the skills of interpretation of marker examination data in the case of viral hepatitis (ELISA, PCR) and the degree of liver fibrosis.* *- Improving the skills of interpreting the data of ultrasound, elastometry, fibrotest.*	6
3.	*- Preparation for the practical lesson "Management of a patient with HIV / AIDS. Differential diagnosis of lymphadenopathy. Management of a patient with HIV-indicator infection ".* *- Improving the skills of pre-test and post-test consultations of a patient with suspected HIV infection.* *- Improving the skills of interpretation of immunogram data and specific diagnostics: ELISA, immunoblot, PCR.* *- Improving the skills of laboratory data interpretation, including specific, diagnosis of HIV-indicator diseases.* *- Improvement of methods for determining CNS and lung lesions in patients with HIV-indicative infection.*	6
4.	*- Preparation for the practical lesson "Management of a patient with acute and chronic diarrheal syndrome in the clinic of infectious diseases."* *- Improving the skills of clinical determination of the degree of dehydration according to WHO recommendations.* *- Improving the skills of interpretation of these laboratory research methods: markers of dehydration, acidosis / alkalosis.* *- Improving the skills of interpretation of specific diagnostic data: microbiological examination of blood, urine, bowel movements, bile, agglutination reaction, indirect hemagglutination reaction, compliment binding reaction, ELISA, immunofluorescence reaction, agglutinating reaction.*	6
5.	*Preparation for the practical lesson "Organization and conduct of emergency care and intensive care."* *- Improving the skills of clinical determination of the degree of dehydration according to WHO recommendations.* *- Improving the skills of interpretation of these laboratory research methods: markers of cerebral edema, ITS.* *- Improving the skills of interpretation of specific diagnostic data: microbiological examination of blood, urine, bowel movements, bile; agglutination reaction, indirect hemagglutination reaction, compliment binding reaction, enzyme-linked immunosorbent assay, immunofluorescence reaction, immunoagglutination reaction, PCR.*	6
Total		30
	Module "Management of patients with tuberculosis"	
1.	*Preparation for the practical lesson "Management of tuberculosis patients".* *- Improving the interpretation of radiological examination of the thoracic cavity and other organs on the topic.* *- Improving the interpretation of the results of laboratory research methods (bacteriological, molecular genetic).*	6
8.	*Preparation for the practical lesson "Management of patients with chemoresistant tuberculosis".* *- Improving the interpretation of the results of laboratory research methods (bacteriological, molecular genetic, tests for drug sensitivity.*	6

9.	*Preparation for the practical lesson "Management of tuberculosis patients in combination with HIV infection".* *- Improving the interpretation of the results of laboratory research methods (bacteriological, molecular genetic, immunological).*	6
Total		18

VII. TEACHING METHODS

Among the teaching methods in the study of the discipline "Internal Medicine with Infectious Diseases and Tuberculosis" depending on the stage of training use the method of preparation for the study of new material and the study of new material, its consolidation in the form of questions for self-control. , where explanatory-illustrative, reproductive, partial-search, research methods can be used, and independent work, where the teacher's guidance is indirect.
Teaching methods:

- verbal (explanation, story, conversation);
- visual (observation, illustration, demonstration);
- practical (practice for developing skills);
- independent work of higher education students on comprehension and assimilation of new material.

Practical classes according to the method of their organization are clinical and include:
1. Consideration of theoretical issues regarding the acquisition of practical skills according to standard lists before each practical lesson and during the control.
2. Solving situational problems.
3. Standardized test control, oral and written questioning.

Independent work includes work in the clinic in extracurricular time to master practical skills, drawing up schemes of differential diagnosis and algorithms for examination of patients, as well as traditional preparation for practical classes and control of mastering the list of topics for self-study.

VIII . CONTROL METHODS

Among the basic methods of control in practical classes after self-study of new material for its consolidation are used tasks in the form of control exercises with their assessment (primary, current, border), which depending on the form of conduction can be: oral questioning (both individual and frontal), or written, or with the help of computer programms, or test, or practical control. Contemporary technologies may include situational modeling (role-playing, games, etc.) or algorithmic / standardization technologies. Interactive methods can include: the method of analysis of specific, problematic situations; method of group discussion; method of competing groups etc.

At the department, **the assessment of the applicant for higher medical education for work in the classroom is complex**, with the use of "four-point" system and includes theoretical knowledge, work with patients, practical skills.

Excellent - the applicant for higher medical education has deeply and steadily mastered the program material; exhaustively, consistently, competently and logically stadyes it. Answers closely relate theory to practice; freely reads results of analyzes and instrumental research and solves situational tasks of increased complexity; properly acquainted with the basic literature and methods of research of the patient in the volume necessary for practical activity of the doctor; demonstrates the ability to relate theoretical aspects of the subject to practical health care.

Good - the applicant for higher medical education properly knows the program material, is competent and essentially stadyes it; has no significant inaccuracies in the answers to the questions; correctly applies theoretical provisions in solving practical tasks; has the necessary skills and techniques for their implementation; is able to solve light and medium difficulty situational tasks; possesses laboratory and clinical research methods in excess of the required

minimum; is able on the basis of the specific content of the answer to show sufficiently logical thinking.

Satisfactory - the applicant for higher medical education knows only the basic material, but has not mastered it in detail, has inaccuracies, insufficiently correct wording, violation of the sequence in the coverage of program material. The applicant for higher medical education is only able to solve the most light tasks, have only a mandatory minimum of research methods; insufficient knowledge of methodology, poor knowledge of basic principles of deontology.

Unsatisfactory - the applicant for higher medical education does not know much of the program material, makes significant mistakes, is not sure, performs practical work with great difficulty.

After completing the full course of the provided program (all classes completed and a academic medical history is defended, etc.), the applicant for higher medical education can not be approved to the final module control without appropriate knowledge and skills. The future physician should be erudite and cultured, have high moral qualities, be merciful and compassionate, constantly follow the rules of medical ethics and deontology.

Independent work of applicants for higher medical education, which is provided in the subject along with the classroom, is evaluated during the ongoing control of the topic in the relevant lesson. The assimilation of topics that are presented only for independent work is controlled during the exam.

Individual work in the form of writing a scheme of differential diagnosis of infectious exanthema and algorithm for examination of a patient with prolonged fever is performed by the applicants for higher medical education during the study of topics. Applicants for higher medical education can rework the missed topics with the teacher during their consultations (individual work with the applicants for higher medical education) no more than 3 times during the study of the discipline, thereby scoring at least a minimum to be admitted to the total modular control.

IX. POINTS CALCULATION SCHEME

Mark in the discipline «Internal medicine with Infectious diseases and phthisiology» that is presented by one module, is rating and is defined as the sum of the marks for current educational activity (in points), which is exposed at each practical lesson on the relevant topic, a point mark for the performance of individual work by an applicant for higher medical education and the mark for the final module control (in points), which is given when evaluating theoretical knowledge and practical skills in accordance with the lists defined by the discipline program.

The current educational activity of applicants for higher medical education is evaluated on a 4-point (traditional) scale, using the criteria of assessment for the discipline «Internal medicine with Infectious diseases and phthisiology» approved by the cycle methodical committee on therapeutic disciplines. This takes into account all types of work provided by methodical development for the planned topic.

Current control is carried out at each practical training according to the specific objectives of the topic and includes standardized forms of control of theoretical training and control of professional skills. Current control includes assessment of the initial level of knowledge (oral or written express survey, test control using test tasks of format A), assessment of the main stage of the practical training (control of professional skills during patients curation, solving typical situational tasks), assessment of the final level of knowledge at the lessons (solving level III situational tasks, interpretation of laboratory and other methods of patient examination).

Evaluation of current educational activities.

During the assessment of mastering of each topic for the current educational activity, the applicants for higher medical education are given grades on a 4-point (traditional) scale, taking into account the approved evaluation criteria for the respective discipline. This takes into account all types of work provided by the curriculum. Applicants for higher medical education should receive a grade on each topic. Forms of assessment of current learning activities should be standardized and include control of theoretical and practical training. Traded scores are

converted into points. The maximum number of points that an applicants for higher medical education can receive for their current educational activity in the study of discipline is 200 points. The minimum number of points that an applicants for higher medical education must receive for their current educational activities to enroll in the discipline is 120 points.

Assessment of success in the discipline is given only to those applicants for higher medical education who have attended all the lessons in the discipline. The mark obtained by the applicants for higher medical education from the discipline is defined as the arithmetic mean of all the lessons of the discipline (by the formula given). The objectivity of evaluating the stadying activities of applicants must be verified by statistical methods (the correlation coefficient between current performance and the results of final control). The maximum number of points that a applicants for higher medical education can receive in the current semester to be approved to final control is 120 points. The minimum number of points that applicants for higher medical education must receive for the current academic activity per semester is 72 points.

The calculation of the number of points is made on the basis of the scores obtained by the applicant on the traditional scale during the study of the discipline, by calculating the arithmetic mean (CA), rounded to two decimal places. The resulting value is converted to scores on a multi-scale as follows:

$$\frac{x = \text{CA} \times 120}{5}$$

For convenience, the table is calculated on a 200-point scale:

Recalculation of the average score for current activity into a multi-scale for disciplines finishing with the differential module.

Table 4

4 - point scale	**200 - point scale**								
5	120	4.54	109	4.08	98	3.62	87	3.2	77
4.95	119	4.5	108	4.04	97	3.58	86	3.16	76
4.91	118	4.45	107	3.99	96	3.54	85	3.15	
4.87	117	4.41	106	3.95	95	3.49	84	3.12	75
4.83	116	4.37	105	3.91	94	3.45	83	3.1	
4.8	115	4.33	104	3.87	93	3.41	82	3.08	74
4.75	114	4.29	103	3.83	92	3.37	81	3.04	73
4.7	113	4.25	102	3.79	91	3.33	80	3	72
4.66	112	4.2	101	3.74	90	3.29	79	Less 3	not enough
4.62	111	4.16	100	3.7	89	3.25	78		
4.58	**110**	**4.12**	**99**	**3.66**	**88**	**3.22**			

Independent work of applicants, which is provided in the subject along with the classroom, is evaluated during the current control of the topic in the relevant lesson.

Individual work in the form of abstracts writing according to the proposed list of topics on new methods of diagnosis or treatment of infectious diseases that are included in the program, is performed by the recipients for content modules 1-5, respectively.

The maximum amount of points that an applicants for higher medical education can obtain during studying the module is 200 points, including for the current educational activity - 72 to 120 points, according to the results of the final module control – 48 to 80 points.

The minimum amount of points that an applicants for higher medical education must earn for their current stadying activities when studying a module is 72 points and is determined by multiplying the number of topics of the module by the equivalent score for a "satisfactory" rating by the given formula.

The final grade in the discipline is set on a two-level scale: a total of 120 points or more - "credited"; a total of 119 points and less - "not credited".

COMPLIANCE WITH THE CODE OF ACADEMIC INTEGRITY

During the study of the discipline, students of the second educational and scientific level in medicine must adhere to the Code of Academic Integrity of Kharkiv National University named after V.N. Karazina. For this purpose of performance of independent work, control works, work on offset has to be carried out individually. When doing independent work, applicants can consult with teachers and other applicants, but must do the task themselves, guided by their own knowledge, skills and abilities. References to all resources and resources used by the applicant in the performance of tasks must be clearly defined and designed in accordance with existing rules and standards. In the case of joint work with other applicants on the tasks, the applicant must indicate the degree of his involvement in the work.

LIST OF QUESTIONS FOR PREPARATION OF APPLICANTS FOR HIGHER MEDICAL EDUCATION IN THE DISCIPLINE "INTERNAL MEDICINE WITH INFECTIOUS DISEASES AND “PHTHISIOLOGY”

CONTENT MODULE "MANAGEMENT OF PATIENTS WITH INFECTIOUS DISEASES, HIV INFECTION"

Each applicant for higher education during the final module control is offered on the example of a situational task (according to the list below):

- to establish a preliminary diagnosis of an infectious disease, to diagnose emergencies;
- to make the differential diagnosis of the main symptoms and syndromes of an infectious disease;
- to make the plan of inspection with the substantiation of each invasive and noninvasive method of diagnostics;
- to determine the necessary regime, diet in the treatment of the disease, tactics of management and provision of emergency medical care, to prescribe medical and non-medical treatment.

THE LIST OF SITUATIONAL TASKS ASSIGNED TO THE MODULE "MANAGEMENT OF PATIENTS WITH INFECTIOUS DISEASES, HIV INFECTION":

1. Typhoid fever
2. Salmonellosis;
3. Food poisoning;
4. Cholera;
5. Botulism;
6. Amoebiasis;
7. Shigellosis;
8. Influenza;
9. Parainfluenza;
10. adenoviral infection;
11. Infectious mononucleosis caused by VEB;
12. Cytomegalovirus infection
13. Rubella;
14. Cyrus;
15. Chickenpox;
16. Epidemic mumps;
17. Diphtheria;
18. Meningococcal infection;
19. Viral hepatitis A, E, B, C, D;
20. Leptospirosis;
21. Malaria;

22. Brucellosis;
23. typhus, Brill-Zinsser disease;
24. HIV infection;
25. Plague;
26. Anthrax.

Content module "Management of patients with tuberculosis "

Each applicant for higher education during the final module control is offered on the example of a situational task (according to the list below):

- to establish a preliminary diagnosis, diagnose emergencies,
- to make a differential diagnosis of the main symptoms and syndromes of the disease,
- to make the plan of inspection with the substantiation of each invasive and noninvasive method of diagnostics,
- to determine the necessary regime, diet in the treatment of the disease, tactics of management and provision of emergency medical care, to prescribe medical and non-medical treatment.

The list of situational tasks assigned to the module "Management of patients with tuberculosis":

1. Primary forms of tuberculosis.
2. Secondary forms of tuberculosis.
3. Extrapulmonary forms of tuberculosis: tuberculosis of bones, lymph nodes, kidneys, meninges, etc.
4. Monoresistant, multidrug-resistant, multidrug-resistant tuberculosis (MRTB) and tuberculosis with extended resistance (RRTB).
5. Tuberculosis in combination with HIV infection.
6. Pulmonary hemorrhage.
7. spontaneous pneumothorax.

METHODOLOGICAL SUPPORT

- working curriculum of the discipline;
- plans of practical classes, independent work of the applicant of HIGHER EDUCATION;
- methodical recommendations and developments for the teacher;
- methodical instructions for practical classes for APPLICANTS OF HIGHER EDUCATION;
- test and control tasks for practical classes;
- questions and tasks to control the assimilation of the discipline;
- multimedia presentations of the lecture course of the department.

IX. RECOMMENDED LEARNING SOURCES:

CONTENT MODULE "MANAGEMENT OF PATIENTS WITH INFECTIOUS DISEASES, HIV INFECTION"

MAIN

1. Infectious Diseases: textbook / O.A. Holubovska, M.A. Andreichyn, A.V. Shkurba et al. Medicine Publishing: 2018. –662p.

2. Infectious diseases: classification, diagnostic, schemes and treatment: study aid / M. Chemych, M. Andreychyn, N. Il'yina, V. Zakhlebayeva, I. Trotska. – Sumy State University, 2011. – 270 p.
3. HIV-infection: a tutorial for medical applicants for higher medical education / O.A. Golubovska, O.Gudzenko, I/ Shestakova Medicine Publishing: 2011. –288p.

Additional

1. Walter R. Wilson, Merle A. Sande. Current diagnosis and treatment in infectious diseases. - Mc Graw Hill, New-York, 2001. - 979 p.
2. Tropical infections : synopsis of lectures to lab. classes : handb. for stud. of higher med. schools / I. L. Dikiy et al. ; Nat. univ. of pharmacy. - Kharkiv : NUPH : Golden Pages, 2010. - 77 p.
3. Harrison's Principles of Internal Medicine, 19th Edition, Part 8: Infectious Diseases // Dan Longo, Anthony Fauci, Dennis Kasper, Stephen Hauser. – 2015.

Information resources

1. Textbooks and Tutorials.
2. Educational and methodical materials of the department.
3. Visual materials for practical classes (tables, diagrams, algorithms, stands, albums, etc.).
4. Educational portal of higher educationhttp://www.osvita.org.ua/.
5. AIDS Clinical Society**:** https://www.eacsociety.org/
6. Clinical Practice guidelines: https://www.journal-of-hepatology.eu/content/collection_cpg
7. Open educational platforms:
   - https://www.coursera.org/learn/bacterial-infections/
   - https://www.coursera.org/learn/aids-fear-hope/
   - https://www.coursera.org/learn/ebola-essentials-for-health-professionals/
   - https://www.coursera.org/course/parasitology
   - https://www.khanacademy.org/science/health-and-medicine/infectious-diseases
   - https://www.edx.org/course/lessons-ebola-preventing-next-pandemic-harvardx-ph557x
   - https://www.khanacademy.org/science/health-and-medicine/infectious-diseases
   - https://www.coursera.org/course/virology
   - https://www.coursera.org/course/virology2
   - https://www.coursera.org/learn/ebola-essentials-for-health-professionals/
   - https://www.coursera.org/course/parasitology
8. Official site of the Ministry of Health of Ukraine: http://www.moz.gov.ua
9. WHO official site: http://www.who.int
10. Centers for Disease Control and Prevention (CDC) http://www.cdc.gov/
11. http://www.atlas-protozoa.com/
12. http://www.freebooks4doctors.com/
13. World Health Organization. WHO global strategy for the surveillance and monitoring of HIV drug resistance 2012 (http:// www.who.int / hiv / pub / drugresistance / drug_resistance strategy /cn.pdf). http://www.euro.who.int/__data/assets/pdf_file/0003/78132/Chap_4_TB_4_web_rus.pdf.
14. http://www.euro.who.int/__data/assets/pdf_file/0005/218516/Management-of-tuberculosis-and-HIV-coinfection-Rus.pdf.

Content module "Management of patients with tuberculosis "

MAIN

1. Tuberculosis: A textbook for medical Universities of IV levels of accreditation / Ed. VI Petrenko. - K .: BCB «Медицина», 2015. - 472 c.
2. Feshchenko YI Organization of control over chemoresistant tuberculosis. Production edition. - K .: Health, 2013. - 704 p.
3. Todoriko LD, Boyko AV The main syndromes and methods of examination in pulmonology and tuberculosis: A textbook for independent work of HIGHER EDUCATORS of senior courses of higher medical educational institutions of III-IV levels of accreditation. - Київ: Медкнига, 2013. - 432 c.
4. Clinical and radiological atlas for the diagnosis of lung diseases / [L.D. Todoriko, IO Semyaniv, VP Шаповалов, A.B. Boyko]; for order. prof. L.D. Todorico. - Chernivtsi: Medical University, 2013. - 342 p.
5. Unified clinical protocol of primary, secondary (specialized) and tertiary (highly specialized) medical care for adults "Tuberculosis", approved by the order of the Ministry of Health of Ukraine 04.09.2014. №620.
6. Unified clinical protocol of primary, secondary (specialized) and tertiary (highly specialized) medical care Co-infection (Tuberculosis / HIV / AIDS), approved by the order of the Ministry of Health of Ukraine on 31.12.2014 № 1039.
7. Petrenko VI Side effects of anti-TB drugs. Textbook. / B.И. Petrenko, EN Roznatovskaya, AV Radysh. - Kyiv: VIT-A-POL LLC, 2014. - 103 p.

Additional

1. Попередження передачі ВІЛ від матері до дитини, діагностика, лікування та соціально-психологічна підтримка ВІЛ-інфікованих / [В.М. Запорожан, М.Л. Аряєв, Н.В. Котова та ін.]. – Київ: Здоров'я, 2010. – 160 с.
2. Закон України № 4565-VI від 22.03.2012 «Про протидію захворюванню на туберкульоз».
3. Наказ МОЗ України № 551 від 12.07.2010 р. Клінічний протокол антиретровірусної терапії ВІЛ-інфекції у дорослих та підлітків.
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