# SYLLABUS

## 1. General information on the course

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| **Full course name** | Infectious Diseases |
| **Full official name of a higher education institution** | Sumy State University |
| **Full name of a structural unit** | Academic and Research Medical Institute. Кафедра інфекційних хвороб з епідеміологією |
| **Author(s)** | Svitailo Vladyslav Serhiiovych, Saienko Oleksandr, Klymenko Natalia, Chemych Mykola Dmytrovych, Chemych Oksana Mykolaivna |
| **Cycle/higher education level** | The Second Level Of Higher Education, National Qualifications Framework Of Ukraine – The 7th Level, QF-LLL – The 7th Level, FQ-EHEA – The Second Cycle |
| **Duration** | two semesters |
| **Workload** | 4 ECTS, 120 hours. For full-time course 86 hours are working hours with the lecturer (10 hours of lectures, 76 hours of seminars), 34 hours of the individual study. |
| **Language(s)** | English |

## 2. Place in the study programme

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| **Relation to curriculum** | Compulsory course available for study programme "Medicine" |
| **Prerequisites** | Krok-1, Latin and Medical Terminology, Up-to-date Problems of Medical Biology, Biomedical Informatics, Biomedical Statistics and Data Analysis, Pharmacology and Medical Prescription, Human Anatomy, Basics of Dynamic Anatomy, Pathomorphology and Pathophysiology, Normal Physiology, Histology, Cytology and Embryology, Clinical Biochemistry, Biological and Bioorganic Chemistry, Microbiology, Virology and Immunology, General Hygiene and Human Ecology including Protection of Labor in Medicine, First Aid, Military Toxicology and Radiology, General Surgery |
| **Additional requirements** | There are no specific requirements |
| **Restrictions** | There are no specific restrictions |

## 3. Aims of the course

The aim is to develop students' in-depth knowledge of the patterns of the modern course of the

pathological process in infectious diseases based on the study of the prevalence of infectious diseases in the world and Ukraine, etiological factors, mechanisms and factors of transmission, the main links of pathogenesis, clinical features of the course, complications. Implementation of the principles of diagnosis and treatment in practice, solving professional problems.

## 4. Contents

| **Module 1. Introduction to infectious diseases. Infectious diseases with fecal-oral mechanism of transmission** |
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| Topic 1 General characteristics of the group of infectious diseases with fecal-oral mechanism of transmission. Typhoid fever. Paratyphoid A and B.<br>General characteristics of the group of infectious diseases with fecal-oral mechanism of transmission. Typhoid fever. Paratyphoid A and B. Etiology, epidemiology, clinic, diagnostics, treatment. |
| Topic 2 Diarrheal syndrome in the clinic of infectious diseases. Salmonellosis. Food toxicoinfections. Infectious diseases of viral etiology with a predominantly fecal-oral mechanism of transmission (enterovirus diseases, rotavirus infection). Poliomyelitis.<br>Diarrheal syndrome in the clinic of infectious diseases. Salmonellosis. Food toxicoinfections. Infectious diseases of viral etiology with a predominantly fecal-oral mechanism of transmission (enterovirus diseases, rotavirus infection). Poliomyelitis.Etiology, epidemiology, clinic, diagnostics, treatment. |
| Topic 3 Types of water-electrolyte balance disorders. Dehydration shock. Cholera.<br>Types of water-electrolyte balance disorders. Dehydration shock. Cholera. Etiology, epidemiology, clinic, diagnostics, treatment. |
| Topic 4 Intestinal infectious diseases with predominant colon involvement: shigellosis, amoebiasis. Protozoal intestinal infections: giardiasis, balantidiasis.<br>Intestinal infectious diseases with predominant colon involvement: shigellosis, amoebiasis. Protozoal intestinal infections: giardiasis, balantidiasis. Etiology, epidemiology, clinic, diagnostics, treatment. |
| Topic 5 Yersiniosis (intestinal, pseudotuberculosis). Botulism.<br>Yersiniosis (intestinal, pseudotuberculosis). Botulism. Etiology, epidemiology, clinic, diagnostics, treatment. |
| Topic 6 Helminth infections. Ascaridosis. Enterobiasis. Trichocephalosis. Hookworm disease. Strongyloidiasis. Trichinosis. Dirofilariasis.<br>Helminth infections.. Ascaridosis. Enterobiasis. Trichocephalosis. Hookworm disease. Strongyloidiasis. Trichinosis. Dirofilariasis. Etiology, epidemiology, clinic. Strongyloidiasis as an AIDS-associated infection. |
| Topic 7 Helminth infections. Toxocariasis. Diphyllobothriosis, taeniarchiasis, taeniasis and cysticercosis, hymenolepidosis, echinococcosis. Alveococcosis. Opisthorchiasis. Schistosomiasis.<br>Helminth infections.. Toxocariasis. Diphyllobothriosis, taeniarchiasis, taeniasis and cysticercosis, hymenolepidosis, echinococcosis. Alveococcosis. Opisthorchiasis. Schistosomiasis. Etiology, epidemiology, clinic. |

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| Topic 8 Diagnostics and basic principles of treatment of common helminthic diseases<br>Diagnostics and basic principles of treatment of common helminthic diseases |
| Topic 9 Emergency conditions in patients with infectious diseases with fecal-oral mechanism of transmission. Dehydration shock. Intestinal bleeding and other surgical complications. Principles of diagnostics and care. Final lesson of content module 1<br>Emergency conditions in patients with infectious diseases with fecal-oral mechanism of transmission. Dehydration shock. Intestinal bleeding and other surgical complications. Principles of diagnostics and care. Final lesson of content module 1 |
| **Module 2. Infectious diseases with airborne transmission mechanism** |
| Topic 10 General characteristics of the group of infectious diseases with airborne transmission mechanism. Influenza. Other ARI: parainfluenza, adenovirus disease, RS infection, rhinovirus infection<br>General characteristics of the group of infectious diseases with airborne transmission mechanism. Influenza. Other ARI: parainfluenza, adenovirus disease, RS infection, rhinovirus infection |
| Topic 11 Infectious diseases that occur with the clinic of atypical pneumonia: respiratory mycoplasmosis, ornithosis, legionellosis.<br>Infectious diseases that occur with the clinic of atypical pneumonia: respiratory mycoplasmosis, ornithosis, legionellosis. |
| Topic 12 Coronavirus infection. SARS. Differential diagnosis of ARI. Principles of diagnostics, treatment and prevention of ARI. Rules of discharge.<br>Coronavirus infection. Clinic, diagnosis, treatment, prevention. The concept of SARS. Differential diagnosis of ARVI. Principles of laboratory diagnosis, treatment and prevention of ARVI. Indications for hospitalization, rules for discharge of patients from an infectious hospital. Medical care for patients at the pre-hospital stage. |
| Topic 13 Herpesvirus infections. General characteristics of herpesvirus infections, etiological structure, place in infectious pathology. Infections caused by herpes simplex viruses HSV-1 and HSV-2. Chickenpox and herpes zoster<br>Herpesvirus infections. General characteristics of herpesvirus infections, etiological structure, place in infectious pathology. Infections caused by herpes simplex viruses HSV-1 and HSV-2. Chickenpox and herpes zoster |
| Topic 14 Herpesvirus infections. EBV infection and CMV infection. Infectious mononucleosis.<br>Herpesvirus infections. EBV infection and CMV infection. Infectious mononucleosis. Etiology, epidemiology, clinic, diagnostics, treatment. |
| Topic 15 "Childhood" droplet infections in adults. Measles. Rubella. Viral mumps disease.<br>"Childhood" droplet infections in adults. Measles. Rubella. Viral mumps disease. |
| Topic 16 Diphtheria. Differential diagnosis of acute tonsillitis syndrome.<br>Diphtheria. Differential diagnosis of acute tonsillitis syndrome. |

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| Topic 17 Meningeal syndrome in the clinic of infectious diseases. Differential diagnosis of serous and purulent meningitis. Edema - swelling of the brain. Meningococcal infection.<br>Meningeal syndrome in the clinic of infectious diseases. Differential diagnosis of serous and purulent meningitis. Edema - swelling of the brain. Meningococcal infection. |
| Topic 18 Emergency conditions in patients with infectious diseases with airborne transmission mechanism. Infectious and toxic shock. True croup. False croup. Acute respiratory failure. Final lesson of content module 2.<br>Emergency conditions in patients with infectious diseases with airborne transmission mechanism. Infectious and toxic shock. True croup. False croup. Acute respiratory failure. Final lesson of content module 2. |
| **Module 3. Viral hepatitis. HIV infection** |
| Topic 19 General characteristics of viral hepatitis. Clinical characteristics of viral hepatitis with fecal-oral mechanism of transmission. Viral hepatitis A. Viral hepatitis E.<br>General characteristics of viral hepatitis. Clinical characteristics of viral hepatitis with fecal-oral mechanism of transmission. Viral hepatitis A. Viral hepatitis E. |
| Topic 20 Clinical characteristics of acute viral hepatitis with parenteral mechanism of transmission. Acute viral hepatitis B and D. Viral hepatitis C. Chronic viral hepatitis. Viral hepatitis G, SEN, TTV. Fulminant viral hepatitis.<br>Clinical characteristics of acute viral hepatitis with parenteral mechanism of transmission. Acute viral hepatitis B. Acute viral hepatitis D. Viral hepatitis C. Chronic viral hepatitis. The concept of viral hepatitis G, SEN, TTV. The concept of fulminant viral hepatitis. |
| Topic 21 Laboratory diagnosis of acute viral hepatitis. Differential diagnosis of viral hepatitis. Treatment tactics. Medical care for patients at the pre-hospital stage.<br>Laboratory diagnosis of acute viral hepatitis. Differential diagnosis of viral hepatitis. Treatment tactics. Medical care for patients at the pre-hospital stage. |
| Topic 22 HIV infection. AIDS-associated infections and infestations.<br>HIV infection. AIDS-associated infections and infestations. |
| Topic 23 Final lesson of the content module 3<br>Final lesson of content module 3. Patient care management |
| **Module 4. Infectious diseases with a vector-borne transmission mechanism** |
| Topic 24 General characteristics of infectious diseases with a vector-borne transmission mechanism. Malaria.<br>General characteristics of infectious diseases with a vector-borne transmission mechanism. Malaria. |
| Topic 25 Prolonged fever syndrome of unknown genesis. Brucellosis. Sepsis.<br>Prolonged fever syndrome of unknown genesis. Brucellosis. Sepsis. |

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| Topic 26 Transmissible diseases transmitted through tick bites: tick-borne encephalitis, Lyme disease.<br>Transmissible diseases transmitted through tick bites: tick-borne encephalitis, Lyme disease. |
| Topic 27 Rickettsiosis. General characteristics of rickettsiosis. Epidemic typhus and Brill's disease. Q fever. Marseille fever.<br>Rickettsiosis. General characteristics of rickettsiosis. Epidemic typhus and Brill's disease. Q fever. Marseille fever. |
| Topic 28 Leishmaniasis.<br>Leishmaniasis. Etiology, epidemiology, classification, clinic, features of diagnosis, treatment. Prevention |
| Topic 29 Arboviral infections: dengue fever, papatachi fever.<br>Arboviral infections: dengue fever, papatachi fever. |
| Topic 30 Final lesson of the content module 4.<br>Final lesson of the content module 4. |
| **Module 5. Infectious diseases with wound and multiple mechanisms of transmission** |
| Topic 31 Infectious diseases with predominant renal involvement: leptospirosis, hemorrhagic fever with renal syndrome. Acute renal failure.<br>Infectious diseases with predominant renal involvement: leptospirosis, hemorrhagic fever with renal syndrome. Acute renal failure. |
| Topic 32 Hemorrhagic fevers: yellow fever, Congo-Crimea fever, Marburg, Ebola, Lassa.<br>Hemorrhagic fevers: yellow fever, Congo-Crimea fever, Marburg, Ebola, Lassa. |
| Topic 33 Infectious diseases with a predominant lesion of the nervous system: rabies, tetanus.<br>Infectious diseases with a predominant lesion of the nervous system: rabies, tetanus. |
| Topic 34 Infectious diseases with predominant skin lesions: erysipelas, felinosis. Erysipeloid. Rat-bite fever<br>Infectious diseases with predominant skin lesions: erysipelas, felinosis. Erysipeloid. Rat-bite fever |
| Topic 35 TORCH-infections. Toxoplasmosis.<br>TORCH-infections. Toxoplasmosis. |
| Topic 36 Quarantine and especially dangerous diseases. Plague. Tularemia. Anthrax. Smallpox. Smallpox of monkeys.<br>Quarantine and especially dangerous diseases. Plague. Tularemia. Anthrax. Smallpox. Smallpox of monkeys. |
| Topic 37 Case history.<br>Case history. |

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| Topic 38 Computer testing. Practical skills.<br>Computer testing. Practical skills. |

## 5. Intended learning outcomes of the course

After successful study of the course, the student will be able to:

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| LO1 | To collect medical information about the patient and analyze clinical data |
| LO2 | To determine the required set of laboratory and instrumental studies and to evaluate their results. |
| LO3 | To establish a provisional and clinical diagnosis of disease. |
| LO4 | To determine the necessary mode of work and rest in the treatment course |
| LO5 | To determine the principles of treatment and treatment modality and to perform medical procedures. |
| LO6 | To identify the main clinical syndromes that determine the severity of the patient's condition |
| LO7 | To assess the objective, psychomotor state of the patient and the results of the examination, according to the diagnosis |
| LO8 | To diagnose medical emergencies, determine the approach to emergency medical care, implement medical evacuation procedures. |
| LO9 | To provide emergency medical care to infectious patients |
| LO10 | To provide medical and evacuation measures in conditions of emergency, military operations |
| LO11 | To prescribe the necessary type of nutrition in the treatment of infectious patients |
| LO12 | To perform medical manipulations on infectious patients |
| LO13 | To perform manipulations in the provision of emergency medical care to infectious patients |
| LO14 | To perform sanitary and hygienic and preventive measures in the centers of infectious diseases |
| LO15 | To analyze the epidemiological situation and take preventive measures |
| LO16 | To provide medical and statistical research on public health |
| LO17 | To evaluate the impact of the environment, socio-economic factors on the health status of an individual and population |
| LO18 | Know how to use personal protective equipment when working with infectious patients |
| LO19 | Be able to analyze the activities of a doctor, unit, health care facility in order to improve the quality of medical care for infectious patients |

## 6. Role of the course in the achievement of programme learning outcomes

Programme learning outcomes achieved by the course.
For 222 Medicine:

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| PO1 | To detect and identify the leading clinical symptoms and syndromes (according to the List 1); to establish the most probable nosological or syndromic preliminary clinical diagnosis of diseases (according to the List 2) using standard methods, preliminary data of the patient's anamnesis, patient's examination data, and knowledge about a human, his organs and systems. |
| PO2 | To collect information about the patient's general condition; to assess the patient's psychomotor and physical development and the state of organs and systems of the body; to assess information on the diagnosis (according to the List 4) based on laboratory and instrumental findings. |
| PO3 | To order and analyze additional (mandatory and optional) examinations (laboratory, radiological, functional and/or instrumental) (according to the List 4) in order to perform a differential diagnosis of diseases (according to the List 2). |
| PO4 | To establish a final clinical diagnosis at a medical institution under control of a supervising doctor by means of informed decision and logical analysis of the obtained subjective and objective data of clinical and additional examinations, and differential diagnosis, following the relevant ethical and legal norms (according to the List 2). |
| PO5 | To detect the key clinical syndrome or the reason for patient's condition severity (according to the List 3) via informed decision and evaluation of the person's state under any circumstances (at home, in the street, at a healthcare facility), including under emergency and military operation conditions, in the field, with a lack of information and limited time. |
| PO6 | To determine the nature and treatment principles (conservative, operative) in patients with diseases (according to the List 2) at a healthcare facility, at patient's home or during medical evacuation process (including in the field), based on the provisional clinical diagnosis and observing the relevant ethical and legal norms, by making a reasonable decision according to existing algorithms and standard procedures based on the principles of evidence-based medicine; if needed to go beyond the standard scheme, to substantiate the personalized recommendations under control of a supervising doctor at a medical facility. |
| PO7 | To determine an appropriate work and rest mode in the treatment of diseases (according to the List 2) at a healthcare institution, at patient's home and during medical evacuation (including in the field), based on the provisional clinical diagnosis and observing the relevant ethical and legal norms, by making a reasonable decision according to existing algorithms and standard procedures. |
| PO8 | To determine an appropriate diet in the treatment of diseases (according to the List 2) at a healthcare institution, at patient's home and during medical evacuation (including in the field), based on the provisional clinical diagnosis and observing the relevant ethical and legal norms, by making a reasonable decision according to existing algorithms and standard procedures. |
| PO11 | To determine the appropriate approach in emergency medical care case under any circumstances, adhering to the relevant ethical and legal norms, by making an informed decision based on the main clinical syndrome (disease severity) and emergency diagnosis (according to the List 3) using standard schemes under limited time conditions based on the principles of evidence-based medicine. |

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| PO12 | To provide emergency medical assistance under any circumstances, adhering to the relevant ethical and legal norms, by making an informed decision based on the main clinical syndrome (disease severity) and emergency diagnosis (according to the List 3) using standard schemes and predetermined approach under limited time conditions based on the principles of evidence-based medicine. |
| PO13 | To organize medical evacuation procedures among the population and the military under emergency and military operation conditions (including in the field), and during the phases of medical evacuation, given the existing system of medical evacuation provision. |
| PO14 | To perform medical procedures (according to the List 5) at a medical facility, at home or at work on the basis of a provisional clinical diagnosis and/or health parameters through making an informed decision and adhering to the relevant ethical and legal norms. |
| PO15 | To perform procedures related to emergency medical assistance within a limited time and under any circumstances, using standard schemes on the basis of a medical emergency diagnosis (according to the List 3). |
| PO16 | To plan and implement a system of sanitary and preventive measures against the occurrence and spread of diseases among the population. |
| PO17 | To analyze epidemiological situation and carry out measures of mass and individual, general and local prevention of infectious diseases. |
| PO18 | To search for the necessary information in the professional literature and databases; to analyze, evaluate, and apply this information. To apply modern digital technologies, specialized software, statistical methods of data analysis to solve complex health problems. |
| PO19 | To assess environmental impact on public health. |
| PO21 | To organize an appropriate level of individual safety (own and of those cared for) in case of typical dangerous situations in the individual field of activity. |
| PO25 | To make effective healthcare decisions assessing resources and considering social, economic, and ethical implications. |

## 7. Soft Skills

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| SS1 | Ability to abstract thinking, analysis, and synthesis. |
| SS2 | Ability to learn, master modern knowledge, and apply the knowledge in practice. |
| SS3 | Knowledge and understanding of the subject area and professional activity comprehension. |
| SS4 | Ability to adapt and act in a new situation |
| SS5 | Ability to make reasoned decisions; teamwork ability; interpersonal skills |
| SS6 | The ability to analyze, evaluate and objectively interpret information, make informed judgments and solve complex problems through logical reasoning and evidence-based decision-making (critical thinking) |
| SS7 | Ability to use information and communication technologies. |

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| SS8 | Determination and perseverance in terms of tasks and responsibilities. |
| SS9 | Ability to identify, formulate and solve problems. |
| SS10 | Ability to act on the basis of ethical considerations (motives). |
| SS11 | Ability to act in a socially responsible and conscious manner. |
| SS12 | Ability to interact interpersonally. |
| SS13 | Ability to search, process and analyze information from various sources. |
| SS14 | Ability to assess and ensure the quality of work performed. |
| SS15 | Ability to work as part of a team. |
| SS16 | Ability to make informed decisions. |
| SS17 | Commitment to environmental protection. |

## 8. Teaching and learning activities

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| **Topic 1. General characteristics of the group of infectious diseases with fecal-oral mechanism of transmission. Typhoid fever. Paratyphoid A and B.** |
| lect.1 "The concept of the infectious process and infectious diseases. Principles of diagnosis of infectious diseases. Prevention and immunoprophylaxis (specific, nonspecific) of infectious diseases, principles of application." (full-time course)<br>The concept of the infectious process and infectious diseases. Principles of diagnosis of infectious diseases. Prevention and immunoprophylaxis (specific, nonspecific) of infectious diseases, principles of application. |
| pr.tr.1 "General characteristics of the group of infectious diseases with fecal-oral mechanism of transmission. Typhoid fever. Paratyphoid A and B." (full-time course)<br>General characteristics of the group of infectious diseases with fecal-oral transmission mechanism. Clinic, diagnostics, treatment and prevention of typhoid fever and paratyphoid fever A and B. The study of this topic involves theoretical work in the classroom. In addition, the study of this topic involves the analysis of clinical cases, mastering practical skills of palpation, percussion at the patient's bedside in the infectious diseases department |
| **Topic 2. Diarrheal syndrome in the clinic of infectious diseases. Salmonellosis. Food toxicoinfections. Infectious diseases of viral etiology with a predominantly fecal-oral mechanism of transmission (enterovirus diseases, rotavirus infection). Poliomyelitis.** |
| lect.2 "General characteristics of the group of diseases with fecal-oral mechanism of transmission. Salmonellosis." (full-time course)<br>General characteristics of the group of diseases with fecal-oral mechanism of transmission. Salmonellosis. |

pr.tr.2 "Diarrheal syndrome in the clinic of infectious diseases. Salmonellosis. Food toxicoinfections. Infectious diseases of viral etiology with a predominantly fecal-oral mechanism of transmission (enterovirus diseases, rotavirus infection). Poliomyelitis." (full-time course)

Diarrheal syndrome in the clinic of infectious diseases. Salmonellosis in the clinic. Food toxicoinfections. Infectious diseases of viral etiology with a predominantly fecal-oral mechanism of transmission (enterovirus diseases, rotavirus infection). Etiology, clinic, diagnosis, treatment and prevention. Poliomyelitis. The study of this topic involves theoretical work in the classroom. In addition, the study of this topic involves the analysis of situational tasks, mastering practical skills of palpation, percussion at the bedside of a patient in the infectious diseases department.

**Topic 3. Types of water-electrolyte balance disorders. Dehydration shock. Cholera.**

pr.tr.3 "Types of water-electrolyte balance disorders. Dehydration shock. Cholera" (full-time course)

Types of water-electrolyte balance disorders. Dehydration shock. Cholera: etiology, epidemiology, pathogenesis, clinic, diagnosis, treatment, prevention, measures in the focus.The study of this topic involves theoretical work in the classroom. In addition, the study of this topic involves the analysis of clinical cases, mastering practical skills of palpation for sampling, providing emergency care for hypovolemic shock

**Topic 4. Intestinal infectious diseases with predominant colon involvement: shigellosis, amoebiasis. Protozoal intestinal infections: giardiasis, balantidiasis.**

pr.tr.4 "Intestinal infectious diseases with predominant colon involvement: shigellosis, amoebiasis. Protozoal intestinal infections: giardiasis, balantidiasis" (full-time course)

Intestinal infectious diseases with predominant colon involvement: shigellosis, amoebiasis. Protozoan intestinal invasions: giardiasis, balantidiasis. Etiology, classification, clinic, diagnosis, differential diagnosis, treatment, monitoring of treatment effectiveness and follow-up. The study of this topic involves theoretical work in the classroom. In addition, the study of this topic involves the analysis of clinical cases, mastering practical skills of palpation, percussion at the bedside of a patient in the infectious diseases department.

**Topic 5. Yersiniosis (intestinal, pseudotuberculosis). Botulism.**

pr.tr.5 "Yersiniosis (intestinal, pseudotuberculosis). Botulism" (full-time course)

Yersiniosis (intestinal, pseudotuberculosis): etiology, epidemiology, classification, clinic, complications, diagnosis, prevention. Botulism: etiology, epidemiology, classification, clinic, laboratory diagnostics, differential diagnostics. The study of this topic involves theoretical work in the classroom. In addition, the study of this topic involves the analysis of situational tasks, clinical cases, mastering practical skills of palpation, percussion, auscultation at the bedside of a patient in the infectious diseases department. The algorithm for administering heterogeneous therapeutic serums is analyzed.

**Topic 6. Helminth infections. Ascaridosis. Enterobiasis. Trichocephalosis. Hookworm disease. Strongyloidiasis. Trichinosis. Dirofilariasis.**

pr.tr.6 "Helminthiasis. Ascaridosis. Enterobiasis. Trichocephalosis. Hookworm disease. Strongyloidiasis. Strongyloidiasis as an AIDS-associated infection. Trichinosis. Dirofilariasis" (full-time course)

Helminthiasis. Ascaridosis. Enterobiasis. Trichocephalosis. Hookworm disease. Strongyloidiasis. Strongyloidiasis as an AIDS-associated infection. Trichinosis. Dirofilariasis. Etiology, classification, clinic, diagnosis, differential diagnosis, treatment, monitoring of treatment effectiveness and follow-up. The study of this topic involves theoretical work in the classroom. In addition, the study of this topic involves the analysis of clinical cases, mastering practical skills of palpation, percussion, auscultation at the bedside of a patient in the infectious diseases department.

**Topic 7. Helminth infections. Toxocariasis. Diphyllobothriosis, taeniarchiasis, taeniasis and cysticercosis, hymenolepidosis, echinococcosis. Alveococcosis. Opisthorchiasis. Schistosomiasis.**

pr.tr.7 "Helminth infections.. Toxocariasis. Diphyllobothriosis, taeniarchiasis, taeniasis and cysticercosis, hymenolepidosis, echinococcosis. Alveococcosis. Opisthorchiasis. Schistosomiasis" (full-time course)

Helminthiasis. Toxocariasis. Diphyllobothriosis, taeniarchiasis, taeniasis and cysticercosis, hymenolepidosis, echinococcosis. Alveococcosis. Opisthorchiasis. Schistosomiasis. Etiology, classification, clinic, diagnosis, differential diagnosis, treatment, monitoring of treatment effectiveness and follow-up. The study of this topic involves theoretical work in the classroom. In addition, the study of this topic involves the analysis of clinical cases, mastering the practical skills of palpation, percussion, auscultation at the bedside of a patient in the infectious diseases department.

**Topic 8. Diagnostics and basic principles of treatment of common helminthic diseases**

pr.tr.8 "Diagnostics and basic principles of treatment of common helminthic diseases" (full-time course)

Diagnostics: macroscopic, coproovoscopic, use of serological and immunological reactions, instrumental types of examinations that help in the diagnosis of helminthiasis. Basic principles of treatment of common helminthic diseases, monitoring of treatment effectiveness. Dispensary observation. The study of this topic involves theoretical work in the classroom. In addition, the study of this topic involves the analysis of situational tasks, familiarization with the methods of diagnosing parasitoses in the Krasovitsky Infectious Diseases Hospital. Interpretation of laboratory and instrumental methods of examination

**Topic 9. Emergency conditions in patients with infectious diseases with fecal-oral mechanism of transmission. Dehydration shock. Intestinal bleeding and other surgical complications. Principles of diagnostics and care. Final lesson of content module 1**

pr.tr.9 "Emergency conditions in patients with infectious diseases with fecal-oral mechanism of transmission. Dehydration shock. Intestinal bleeding and other surgical complications. Principles of diagnostics and care. Final lesson of content module 1" (full-time course)

Emergency conditions in patients with infectious diseases with fecal-oral mechanism of transmission. Dehydration shock. Intestinal bleeding and other surgical complications of intestinal infectious diseases. Principles of diagnosis and care. The study of this topic involves theoretical work in the classroom. In addition, the study of this topic involves the analysis of situational tasks, group cases. Final lesson of content module 1

**Topic 10. General characteristics of the group of infectious diseases with airborne transmission mechanism. Influenza. Other ARI: parainfluenza, adenovirus disease, RS infection, rhinovirus infection**

lect.3 "General characteristics of the group of diseases with airborne transmission mechanism. Influenza." (full-time course)

General characteristics of the group of diseases with airborne transmission mechanism. Influenza.

pr.tr.10 "General characteristics of the group of infectious diseases with airborne transmission mechanism. Influenza. Other ARI: parainfluenza, adenovirus disease, RS infection, rhinovirus infection" (full-time course)

General characteristics of the group of infectious diseases with airborne transmission mechanism. Influenza. Other ARI: parainfluenza, adenovirus disease, RS infection, rhinovirus infection: etiology, epidemiology, clinic, laboratory diagnosis, treatment and prevention. The study of this topic involves theoretical work in the classroom. In addition, the study of this topic involves the analysis of situational problems, mastering practical skills in sampling, conducting rapid tests to determine the pathogen, palpation, percussion and auscultation at the bedside in the infectious diseases department. Interpretation of the results of laboratory and instrumental examination methods. Drawing up a treatment plan.

**Topic 11. Infectious diseases that occur with the clinic of atypical pneumonia: respiratory mycoplasmosis, ornithosis, legionellosis.**

pr.tr.11 "Infectious diseases that occur with the clinic of atypical pneumonia: respiratory mycoplasmosis, ornithosis, legionellosis." (full-time course)

Etiology of atypical pneumonias. Clinic, laboratory diagnosis, treatment and prevention of respiratory mycoplasmosis, ornithosis, legionellosis. The study of this topic involves theoretical work in the classroom. In addition, the study of this topic involves the analysis of situational tasks, mastering practical skills in sampling, palpation, percussion and auscultation at the bedside of a patient in the infectious diseases department. Interpretation of the results of laboratory and instrumental examination methods. Drawing up a treatment plan.

**Topic 12. Coronavirus infection. SARS. Differential diagnosis of ARI. Principles of diagnostics, treatment and prevention of ARI. Rules of discharge.**

pr.tr.12 "Coronavirus infection. SARS. Differential diagnosis of ARI. Principles of diagnostics, treatment and prevention of ARI. Rules of discharge." (full-time course)

Coronavirus diseases. The concept of SARS. Differential diagnosis of ARVI. Principles of laboratory diagnosis, treatment and prevention of ARVI. Indications for hospitalization, rules for discharge of patients from an infectious hospital. Medical care of patients at the pre-hospital stage. The study of this topic involves theoretical work in the classroom. In addition, the study of this topic involves the analysis of situational tasks, mastering practical skills in sampling, conducting rapid tests to determine the pathogen, palpation, percussion and auscultation at the bedside of a patient in the infectious diseases department. Interpretation of the results of laboratory and instrumental examination methods. Drawing up a treatment plan.

**Topic 13. Herpesvirus infections. General characteristics of herpesvirus infections, etiological structure, place in infectious pathology. Infections caused by herpes simplex viruses HSV-1 and HSV-2. Chickenpox and herpes zoster**

pr.tr.13 "Herpesvirus infections. General characteristics of herpesvirus infections, etiological structure, place in infectious pathology. Infections caused by herpes simplex viruses HSV-1 and HSV-2. Chickenpox and herpes zoster" (full-time course)

Herpesvirus infections. General characteristics of herpesvirus infections, etiological structure, place in infectious pathology. Infections caused by herpes simplex viruses HSV-1 and HSV-2. Chickenpox and herpes zoster. Clinic, differential diagnosis, treatment and prevention of herpesvirus infections caused by types 1-3. The study of this topic involves theoretical work in the classroom. In addition, the study of this topic involves the analysis of clinical cases, mastering practical skills in sampling, palpation, percussion and auscultation at the patient's bedside in the infectious diseases department. Interpretation of the results of laboratory and instrumental examination methods. Drawing up a treatment plan.

**Topic 14. Herpesvirus infections. EBV infection and CMV infection. Infectious mononucleosis.**

pr.tr.14 "Herpesvirus infections. EBV infection and CMV infection. Infectious mononucleosis." (full-time course)

Herpesvirus infections. EBV infection and CMV infection: acute and chronic variants of the course. Infectious mononucleosis: epidemiology, classification, clinic, laboratory diagnosis, treatment and prevention. The study of this topic involves theoretical work in the classroom. In addition, the study of this topic involves the analysis of clinical cases, mastering practical skills in sampling, palpation, percussion and auscultation at the bedside of a patient in the infectious diseases department. Interpretation of the results of laboratory and instrumental examination methods. Drawing up a treatment plan

**Topic 15. "Childhood" droplet infections in adults. Measles. Rubella. Viral mumps disease.**

pr.tr.15 ""Childhood" droplet infections in adults. Measles. Rubella. Viral mumps disease." (full-time course)

"Childhood" droplet infections in adults. Measles. Rubella. Viral mumps disease. Etiology, epidemiology, variants of the course, diagnosis, treatment and prevention. The study of this topic involves theoretical work in the classroom. In addition, the study of this topic involves the analysis of clinical cases, role-playing games, mastering practical skills in sampling, palpation, percussion and auscultation at the bedside of a patient in the infectious diseases department. Interpretation of the results of laboratory and instrumental examination methods

**Topic 16. Diphtheria. Differential diagnosis of acute tonsillitis syndrome.**

pr.tr.16 "Diphtheria. Differential diagnosis of acute tonsillitis syndrome." (full-time course)

Diphtheria: etiology, epidemiology, classification, clinic, complications. Diagnostic algorithm. Treatment, discharge rules, follow-up, prevention. Differential diagnosis of acute tonsillitis syndrome. The study of this topic involves theoretical work in the classroom. In addition, the study of this topic involves the analysis of clinical cases, mastering practical skills in sampling, palpation, percussion and auscultation at the bedside of a patient in the infectious diseases department. Interpretation of the results of laboratory and instrumental examination methods. Drawing up a treatment plan and methods of using immunobiological drugs.

**Topic 17. Meningeal syndrome in the clinic of infectious diseases. Differential diagnosis of serous and purulent meningitis. Edema - swelling of the brain. Meningococcal infection.**

pr.tr.17 "Meningeal syndrome in the clinic of infectious diseases. Differential diagnosis of serous and purulent meningitis. Edema - swelling of the brain. Meningococcal infection." (full-time course)

Meningeal syndrome in the clinic of infectious diseases. Classification of meningitis. Differential diagnosis of serous and purulent meningitis. Meningococcal infection: epidemiology, pathogenesis, classification, clinic, diagnosis, treatment, rules for discontinuation of antibiotic therapy in purulent meningitis, rules for discharge, follow-up, preventive measures. The study of this topic involves theoretical work in the classroom. In addition, the study of this topic involves the analysis of clinical cases, mastering practical skills in sampling, palpation, percussion and auscultation, checking meningeal and focal signs at the patient's bedside in the infectious diseases department. The methodology of lumbar puncture and interpretation of the results of laboratory and instrumental examination methods is analyzed. Drawing up a treatment plan.

**Topic 18. Emergency conditions in patients with infectious diseases with airborne transmission mechanism. Infectious and toxic shock. True croup. False croup. Acute respiratory failure. Final lesson of content module 2.**

pr.tr.18 "Emergency conditions in patients with infectious diseases with airborne transmission mechanism. Infectious and toxic shock. True croup. False croup. Acute respiratory failure. Final lesson of content module 2." (full-time course)

Emergency conditions in patients with infectious diseases with airborne transmission mechanism. Infectious and toxic shock. Acute adrenal insufficiency (Waterhouse-Friedericksen syndrome). True croup. False croup. Acute respiratory failure. Cerebral edema. Brain coma. The study of this topic involves theoretical work in the classroom. In addition, the study of this topic involves the analysis of clinical cases, role-playing games, mastering practical skills in palpation, percussion and auscultation at the bedside of a patient in the infectious diseases department. Interpretation of the results of laboratory and instrumental methods of examination. Algorithm for providing emergency care in emergency conditions. Final lesson of content module 2.

**Topic 19. General characteristics of viral hepatitis. Clinical characteristics of viral hepatitis with fecal-oral mechanism of transmission. Viral hepatitis A. Viral hepatitis E.**

pr.tr.19 "General characteristics of viral hepatitis. Clinical characteristics of viral hepatitis with fecal-oral mechanism of transmission. Viral hepatitis A. Viral hepatitis E." (full-time course)

General characteristics of viral hepatitis. Clinical characteristics of viral hepatitis with fecal-oral mechanism of transmission. HAV. HEV. Features of epidemiology, classification, clinic and differential diagnosis. The study of this topic involves theoretical work in the classroom. In addition, the study of this topic involves the analysis of clinical cases, mastering practical skills in sampling, palpation, percussion and auscultation at the bedside in the infectious diseases department. Interpretation of the results of laboratory and instrumental examination methods. Drawing up a treatment plan.

**Topic 20. Clinical characteristics of acute viral hepatitis with parenteral mechanism of transmission. Acute viral hepatitis B and D. Viral hepatitis C. Chronic viral hepatitis. Viral hepatitis G, SEN, TTV. Fulminant viral hepatitis.**

lect.4 "General characteristics of the group of diseases with a hemocontact mechanism of transmission. Viral hepatitis B, C, D." (full-time course)

General characteristics of the group of diseases with a hemocontact mechanism of transmission. Viral hepatitis B, C, D

pr.tr.20 "Clinical characteristics of acute viral hepatitis with parenteral mechanism of transmission. Acute viral hepatitis B and D. Viral hepatitis C. Chronic viral hepatitis. Viral hepatitis G, SEN, TTV. Fulminant viral hepatitis." (full-time course)

Laboratory and instrumental diagnosis of acute and chronic viral hepatitis. Differential diagnosis of acute and chronic viral hepatitis. Indications for hospitalization. Treatment tactics. Indications for antiviral therapy. Medical care of patients at the pre-hospital stage. The study of this topic involves theoretical work in the classroom. In addition, the study of this topic involves the analysis of clinical cases, mastering practical skills in sampling, palpation, percussion and auscultation at the bedside of a patient in the infectious diseases department. Interpretation of the results of laboratory and instrumental examination methods. Drawing up a treatment plan.

**Topic 21. Laboratory diagnosis of acute viral hepatitis. Differential diagnosis of viral hepatitis. Treatment tactics. Medical care for patients at the pre-hospital stage.**

pr.tr.21 "Laboratory diagnosis of acute viral hepatitis. Differential diagnosis of viral hepatitis. Treatment tactics. Medical care for patients at the pre-hospital stage." (full-time course)

Laboratory and instrumental diagnosis of acute and chronic viral hepatitis. Differential diagnosis of acute and chronic viral hepatitis. Indications for hospitalization. Treatment tactics. Indications for antiviral therapy. Medical care of patients at the pre-hospital stage. The study of this topic involves theoretical work in the classroom. In addition, the study of this topic involves the analysis of clinical cases, mastering practical skills in sampling, palpation, percussion and auscultation at the bedside of a patient in an infectious diseases unit. Interpretation of the results of laboratory and instrumental examination methods. Drawing up a treatment plan.

**Topic 22. HIV infection. AIDS-associated infections and infestations.**

lect.5 "HIV infection and HIV-associated diseases" (full-time course)

Etiology, epidemiology, pathogenesis of HIV infection. Classification, clinic, diagnostic features. HIV-associated diseases. Peculiarities of prescribing treatment for HIV infection.

pr.tr.22 "HIV infection. AIDS-associated infections and infestations." (full-time course)

HIV infection. Etiology. Epidemiology. Classification. AIDS-associated infections and infestations. Pre-test and post-test counseling. Treatment. Dispensary observation. The study of this topic involves theoretical work in the classroom. In addition, the study of this topic involves the analysis of clinical cases, role-playing games, mastering practical skills in sampling, and conducting rapid tests, palpation, percussion and auscultation at the bedside of a patient in the infectious diseases department. Interpretation of the results of laboratory and instrumental methods of examination. Drawing up an examination plan for newly diagnosed HIV infection before prescribing antiviral treatment.

**Topic 23. Final lesson of the content module 3**

pr.tr.23 "Final lesson of the content module 3" (full-time course)

Final lesson of content module 3. Patient care management

**Topic 24. General characteristics of infectious diseases with a vector-borne transmission mechanism. Malaria.**

pr.tr.24 "General characteristics of infectious diseases with a vector-borne transmission mechanism. Malaria." (full-time course)

General characteristics of infectious diseases with a vector-borne mechanism of transmission. Malaria: etiology, epidemiology, classification, clinical manifestations, treatment, prevention. The study of this topic involves theoretical work in the classroom. In addition, the study of this topic involves the analysis of clinical cases, mastering practical skills in blood sampling for a "thick drop", palpation, percussion and auscultation at the bedside in the infectious diseases department. Interpretation of the results of laboratory and instrumental examination methods. Drawing up a treatment plan

**Topic 25. Prolonged fever syndrome of unknown genesis. Brucellosis. Sepsis.**

pr.tr.25 "Prolonged fever syndrome of unknown genesis. Brucellosis. Sepsis." (full-time course)

Prolonged fever syndrome of unknown genesis. Brucellosis. Etiology, clinic, diagnosis, treatment and prevention. Sepsis. The study of this topic involves theoretical work in the classroom. In addition, the study of this topic involves the analysis of clinical cases, mastering practical skills in palpation, percussion and auscultation, checking symptoms indicating a lesion of the musculoskeletal system at the bedside of a patient in the infectious diseases department. Interpretation of the results of laboratory and instrumental methods of examination. Drawing up a treatment plan. Features of the use of the vaccine for the treatment of chronic brucellosis.

**Topic 26. Transmissible diseases transmitted through tick bites: tick-borne encephalitis, Lyme disease.**

pr.tr.26 "Transmissible diseases transmitted through tick bites: tick-borne encephalitis, Lyme disease." (full-time course)

Vector-borne diseases transmitted by tick bites: tick-borne encephalitis, Lyme disease. Etiology, clinic, diagnosis, treatment and prevention. The study of this topic involves theoretical work in the classroom. In addition, the study of this topic involves the analysis of clinical cases, role-playing games, mastering practical skills in checking meningeal signs, performing lumbar puncture, palpation, percussion and auscultation at the bedside of a patient in the infectious diseases department. Interpretation of the results of laboratory and instrumental examination methods. Drawing up a treatment plan.

**Topic 27. Rickettsiosis. General characteristics of rickettsiosis. Epidemic typhus and Brill's disease. Q fever. Marseille fever.**

pr.tr.27 "Rickettsiosis. General characteristics of rickettsiosis. Epidemic typhus and Brill's disease. Q fever. Marseille fever." (full-time course)

Rickettsiosis. General characteristics of rickettsiosis. Epidemic typhus and Brill's disease. Cu-fever. Marseille fever. Etiology, clinic, diagnosis, treatment and prevention. The study of this topic involves theoretical work in the classroom. In addition, the study of this topic involves the analysis of clinical cases, mastering practical skills in palpation, percussion and auscultation at the bedside of a patient in the infectious diseases department. Interpretation of the results of laboratory and instrumental examination methods. Drawing up a treatment plan.

**Topic 28. Leishmaniasis.**

pr.tr.28 "Leishmaniasis" (full-time course)

Leishmaniasis. Etiology, epidemiology, classification, clinic, features of diagnosis, treatment. Prevention. The study of this topic involves theoretical work in the classroom. In addition, the study of this topic involves the analysis of situational tasks, mastering practical skills in sampling material for research. Interpretation of the results of laboratory and instrumental examination methods. Drawing up a plan for treatment and prevention of infection.

**Topic 29. Arboviral infections: dengue fever, papatachi fever.**

pr.tr.29 "Arboviral infections: dengue fever, papatachi fever." (full-time course)

Arboviral infections: dengue fever, papatachi fever. Etiology, clinic, diagnosis, treatment and prevention. The study of this topic involves theoretical work in the classroom. In addition, the study of this topic involves the analysis of clinical cases and situational tasks. Interpretation of the results of laboratory and instrumental examination methods. Drawing up a treatment plan.

**Topic 30. Final lesson of the content module 4.**

pr.tr.30 "Final lesson of the content module 4." (full-time course)

Final lesson of the content module 4.

**Topic 31. Infectious diseases with predominant renal involvement: leptospirosis, hemorrhagic fever with renal syndrome. Acute renal failure.**

pr.tr.31 "Infectious diseases with predominant renal involvement: leptospirosis, hemorrhagic fever with renal syndrome. Acute renal failure." (full-time course)

Infectious diseases with predominant renal involvement: leptospirosis, hemorrhagic fever with renal syndromes: etiology, epidemiology, clinic, diagnosis, treatment, prevention. Clinical manifestations and approaches to the treatment of acute renal failure. The study of this topic involves theoretical work in the classroom and practical skills in examining patients in the infectious diseases department. In addition, the study of this topic involves the analysis of clinical cases and situational tasks. Interpretation of the results of laboratory and instrumental examination methods. Drawing up a treatment plan.

**Topic 32. Hemorrhagic fevers: yellow fever, Congo-Crimea fever, Marburg, Ebola, Lassa.**

pr.tr.32 "Hemorrhagic fevers: yellow fever, Congo-Crimea fever, Marburg, Ebola, Lassa." (full-time course)

Hemorrhagic fevers: yellow fever, Congo-Crimea, Marburg, Ebola, Lassa. Etiology, clinic, diagnosis, treatment and prevention. Arboviral infections: dengue fever, papatachi fever. Etiology, clinic, diagnosis, treatment and prevention. The study of this topic involves theoretical work in the classroom. In addition, the study of this topic involves the analysis of clinical cases and situational tasks. The method of putting on and taking off PPE is analyzed. Interpretation of the results of laboratory and instrumental examination methods. Drawing up a treatment plan.

**Topic 33. Infectious diseases with a predominant lesion of the nervous system: rabies, tetanus.**

pr.tr.33 "Infectious diseases with a predominant lesion of the nervous system: rabies, tetanus." (full-time course)

Infectious diseases with predominant nervous system involvement: rabies, tetanus. Etiology, clinic, diagnosis, treatment and prevention. Arboviral infections: dengue fever, papatachi fever. Etiology, clinic, diagnosis, treatment and prevention. The study of this topic involves theoretical work in the classroom. In addition, the study of this topic involves the analysis of clinical cases, situational tasks, role-playing games, mastering practical skills in providing care to patients with rabies, tetanus (requirements for the room where the patient is located, etc.) Interpreting the results of laboratory and instrumental examination methods. Drawing up a treatment plan, peculiarities of using immunobiological drugs in the treatment of this group of patients.

**Topic 34. Infectious diseases with predominant skin lesions: erysipelas, felinosis. Erysipeloid. Rat-bite fever**

pr.tr.34 "Infectious diseases with predominant skin lesions: erysipelas, felinosis. Erysipeloid. Rat-bite fever" (full-time course)

Infectious diseases with predominant skin lesions: erysipelas, felinosis. Erysipeloid. Disease from a rat bite. Etiology, clinic, diagnosis, treatment and prevention. The study of this topic involves theoretical work in the classroom and practical skills in examining patients in the infectious diseases department. In addition, the study of this topic involves the analysis of clinical cases and situational tasks. Interpretation of the results of laboratory and instrumental examination methods. Drawing up a treatment plan and dispensary observation and prevention.

**Topic 35. TORCH-infections. Toxoplasmosis.**

pr.tr.35 "TORCH-infections. Toxoplasmosis." (full-time course)

TORCH-infections. Toxoplasmosis. Etiology, clinic, diagnosis, treatment and prevention. The study of this topic involves theoretical work in the classroom and practical skills in examining patients in the infectious diseases department. In addition, the study of this topic involves the analysis of clinical cases, situational tasks, role-playing games on diagnosis, objective examination of patients with nervous system disorders, tactics in case of suspected infections in pregnant women. Interpretation of the results of laboratory and instrumental examination methods. Drawing up a treatment plan.

**Topic 36. Quarantine and especially dangerous diseases. Plague. Tularemia. Anthrax. Smallpox. Smallpox of monkeys.**

pr.tr.36 "Quarantine and especially dangerous diseases. Plague. Tularemia. Anthrax. Smallpox. Smallpox of monkeys." (full-time course)

Quarantine and especially dangerous diseases. Plague. Tularemia. Anthrax. Smallpox. Smallpox of monkeys. Etiology, clinic, diagnosis, treatment and prevention.The study of this topic involves theoretical work in the classroom. In addition, the study of this topic involves the analysis of clinical cases, situational tasks, team-oriented learning. The method of putting on and taking off PPE is analyzed. Interpretation of the results of laboratory and instrumental examination methods. Drawing up a treatment plan and emergency prophylaxis.

**Topic 37. Case history.**

pr.tr.37 "Case history." (full-time course)

Defending of academic medical history.

| **Topic 38. Computer testing. Practical skills.** |
|---|
| pr.tr.38 "Computer testing. Practical skills." (full-time course)<br>Computerized testing on MIX. Practical skills. |

## 9. Teaching methods

9.1 Teaching methods

Course involves learning through:

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|---|---|
| TM1 | Lecture teaching |
| TM2 | Team Based Learning |
| TM3 | Research Based Learning |
| TM4 | Practical training |
| TM5 | Self-study |
| TM6 | Electronic learning |
| TM7 | Case-based learning |
| TM8 | Mobile learning |

The discipline is taught using modern teaching methods (CBL, TBL), which contribute not only to the development of professional skills but also stimulate creative thinking.

Students acquire soft skills throughout the entire period of studying the discipline. The ability to analytical and critical thinking, teamwork, and perseverance is formed during team-, practice-, and case-based learning, and knowledge and understanding of the subject area is acquired through self-study. E-learning stimulates the ability to use information technology.

9.2 Learning activities

| | |
|---|---|
| LA1 | Evaluation and interpretation of patient examination data (results of clinical blood, urine, biochemical, serological, immunological tests, PCR, bacteriological, virological tests; X-ray of the chest, MRI, CT of the brain, chest, abdominal organs, ECG) |
| LA2 | Performing a group practical task |
| LA3 | Preparation for practical classes |
| LA4 | Interactive lectures |
| LA5 | E-learning in systems (MIX, Google Classroom, Zoom and in the format of a YouTube channel) |
| LA6 | Writing and presenting the medical history |
| LA7 | Work with textbooks and relevant information sources |
| LA8 | Practical work with a patient at the Krasovitsky Infectious Diseases Hospital |
| LA9 | Preparing for the exam |

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|---|---|
| LA10 | Individual research project (student research paper, article, thesis, etc.) |
| LA11 | Use of mobile devices and applications, the list of which is specified by the teacher |

## 10. Methods and criteria for assessment

10.1. Assessment criteria

| Definition | National scale | Rating scale |
|---|---|---|
| Outstanding performance without errors | 5 (Excellent) | 170 ≤ RD ≤ 200 |
| Above the average standard but with minor errors | 4 (Good) | 164 ≤ RD < 169 |
| | 4 (Good) | 140 ≤ RD < 163 |
| Fair but with significant shortcomings | 3 (Satisfactory) | 127 ≤ RD < 139 |
| | 3 (Satisfactory) | 120 ≤ RD < 126 |
| Fail – some more work required before the credit can be awarded | 2 (Fail) | 70 ≤ RD < 119 |
| | 2 (Fail) | 0 ≤ RD < 69 |

10.2 Formative assessment

| | **Description** | **Deadline, weeks** | **Feedback** |
|---|---|---|---|
| FA1<br>Peer assessment | Partnership interaction aimed at improving learning outcomes by comparing one's current level of performance with previous indicators. Provides an opportunity to analyze your own educational activities | During the entire period of studying the discipline | Adjusting teaching approaches together with students based on assessment results |
| FA2<br>Consulting with a teacher when writing a medical history | Writing a medical history involves demonstrating the ability to work with a patient, consolidating practical skills in physical examination of a patient, evaluating and analyzing medical records, establishing a clinical diagnosis with elements of differential diagnosis, and prescribing treatment. Protection of medical history is provided. | Writing during the cycle, presentation and defense - according to the calendar and thematic plan | Advising by a teacher during the writing of the medical history with oral comments. The applicant receives a grade for writing a medical history (6 points maximum) and presentation (6 points maximum) |

| | | | |
|---|---|---|---|
| FA3<br>Final computer control | A method of effective testing of the level of knowledge, skills and abilities in a discipline. Testing allows you to check the learning outcomes upon completion of the discipline. | At the last class in the discipline. | The maximum number of points for the test is 3 points, provided that 100% of the answers are correct. The minimum score for successful completion of the tests is 1.8 points (60% of correct answers) |
| FA4<br>Teacher's instructions in the process of performing practical tasks | The guidelines describe methods of pedagogical control over the professional activities of students. Efficiency is determined by compliance with all stages of practical tasks. The effectiveness of the formation of the necessary practical skills depends on the level of practical competence. | During the entire period of studying the discipline | Counseling students in working with patients, direct and indirect observation of the work of applicants "at the bedside" of the patient with the subsequent determination of the level of practical training |
| FA5<br>Solving clinical cases | The case method allows to reveal and form the qualities and abilities of medical students necessary for their future work, develops clinical thinking, analytical skills, independence in decision-making, communication skills, and skills of working with a sufficiently large amount of information. | During the entire period of studying the discipline | Assessment of the student's ability to think clinically, justify their decisions, clearly express their thoughts, determine the level of theoretical training, which is reflected in the appropriate assessment |

| | | | |
|---|---|---|---|
| FA6 Intermediate modular controls | A method of effectively checking the level of knowledge, skills and abilities in each module of the discipline. Testing and a written assignment with a case study allows you to check the mastery of educational material on each topic. | Topics 9, 18, 23, and 30 in the calendar and thematic plan | The student must provide 60% correct answers to the tests and receive a positive grade for the written work |
| FA7 Tasks of assessing the level of theoretical training | Assessment of the acquired theoretical knowledge on the subject matter of the discipline. It is carried out at each practical lesson in accordance with the specific objectives of each topic on the basis of a comprehensive assessment of student performance, including control of the level of theoretical training, independent work according to the thematic plan | During the entire period of studying the discipline | Feedback is aimed at supporting students' independent work, identifying shortcomings and assessing the level of acquired theoretical knowledge. |
| FA8 Checking the implementation of practical skills | Practicing practical skills in examining patients, taking material for research, conducting rapid tests, etc. | Throughout the entire period of study.At the last lesson, the student must successfully complete pra | Successful completion of practical skills in the discipline is an admission to the exam. The maximum number of points is 5, the minimum is 3 |
| FA9 Consulting by a teacher during the preparation of an individual research project (presentation at a conference, competition of scientific papers) | Involvement of students in research activities contributes to the formation of their scientific outlook, diligence, efficiency, initiative, etc. | During the entire period of studying the discipline | Incentive points - 12 points for the defense of a student research paper, 5 points for a conference presentation, 3 points for abstracts, and 5 points for a multimedia presentation. The maximum number of these points should not exceed 12, and the tot |

| | | | |
|---|---|---|---|
| FA10<br>Survey and oral comments of the teacher on its results | Assessment of the acquired theoretical knowledge on the subject matter of the discipline. It is carried out at each practical lesson in accordance with the specific objectives of each topic on the basis of a comprehensive assessment of student performance, including control of the level of theoretical training, independent work according to the thematic plan | During the entire period of studying the discipline | Feedback is aimed at supporting students' independent work, identifying shortcomings and assessing the level of acquired theoretical knowledge |
| FA11<br>Diagnostic testing | Using the application provides the ability to calculate the degree of liver fibrosis | when studying topics 20 and 21 | Feedback is aimed at helping students master mobile applications that facilitate diagnostics |

10.3 Summative assessment

| | **Description** | **Deadline, weeks** | **Feedback** |
|---|---|---|---|
| SA1<br>Final control: exam | Passing a practice-oriented exam. Applicants who have successfully mastered the material in the discipline, passed practical skills and final computer testing, and defended their medical history are allowed to take the exam. | According to the schedule | An applicant can get 80 points for the exam. The minimum number of points that a student must receive is 48 points |
| SA2<br>Evaluation of writing and presenting a medical history | Writing a medical history involves demonstrating the ability to work with a patient, consolidating practical skills in physical examination of a patient, evaluating and analyzing medical records, making a clinical diagnosis with elements of differential diagnosis, and prescribing treatment. There is a medical history defense, when the student has to answer questions about the patient he or she supervised, the causes of the disease, modern methods of diagnosis and treatment. | Writing during the cycle, presentation and defense - according to the calendar and thematic plan | Consulting by the teacher during the writing of the medical history with oral comments. The applicant receives a grade for writing a medical history (6 points maximum) and defense (6 points maximum) |

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|---|---|---|---|
| SA3<br>Final computer control | A method of effective testing of the level of knowledge, skills and abilities in a discipline. Testing allows you to check the learning outcomes upon completion of the discipline. | At the last class in the discipline. | The maximum number of points for the test is 3 points, provided that 100% of the answers are correct. The minimum score for successful completion of the tests is 1.8 points (60% of correct answers) |
| SA4<br>Current assessment of the level of theoretical and practical training | Ongoing assessment of the level of theoretical training and testing | During the entire period of studying the discipline | The result of the performance of the assignment affects the comprehensive grade for the practical lesson. the minimum for the lesson is 1.5 points, the maximum is 2.5. For the year, the minimum score is 72 points, the maximum is 120 points |
| SA5<br>Assessment of practical skills and manipulations | Comprehensive development of the practical component of the curriculum in a safe simulation environment for students. Provides an opportunity to master skills in various emergency conditions. | At the last class of the dissertation, the student must successfully complete a list of practical sk | It is required for admission to the exam. The maximum number of points is 5, the minimum is 3 |

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|---|---|---|---|
| SA6 Intermediate modular controls | A method of effectively checking the level of knowledge, skills and abilities in each module of the discipline. Testing and a written assignment with a case study allows you to check the mastery of educational material on each topic. | Topics 9, 18, 23, and 30 in the calendar and thematic plan | The student must provide 60% correct answers to the tests and receive a positive grade for the written work |

Form of assessment:

| | Points | Можливість перескладання з метою підвищення оцінки |
|---|---|---|
| **The second semester of teaching** | **200 scores** | |
| SA1. Final control: exam | **80** | |
| Passing a practice-oriented exam. Applicants who have successfully mastered the material in the discipline, passed practical skills and final computer testing, and defended their medical history are allowed to take the exam. | 80 | No |
| SA2. Evaluation of writing and presenting a medical history | **12** | |
| An applicant receives a grade for writing a medical history (6 points maximum) and defense (6 points maximum) | 12 | No |
| SA3. Final computer control | **3** | |
| The maximum number of points for the test is 3 points, provided that 100% of the answers are correct. The minimum score for successful completion of the tests is 1.8 points (60% of correct answers) | 3 | No |
| SA4. Current assessment of the level of theoretical and practical training | **80** | |
| The result of the performance of the assignment affects the comprehensive grade for the practical lesson. the minimum for the lesson is 1.5 points, the maximum is 2.5. | 80 | No |
| SA5. Assessment of practical skills and manipulations | **5** | |
| It is required for admission to the exam. The maximum number of points is 5, the minimum is 3 | 5 | No |
| SA6. Intermediate modular controls | **20** | |
| It is held after studying all the topics of the module | 20 | No |

When mastering the materials of the module, a student is awarded a maximum of 2.5 points for each practical lesson (the grade is given in the traditional 4-point grading system). The following points are awarded for the defense of the work on writing and defending the medical history: "5" - 6 points, "4" - 4.8 points, "3" - 3.6 points, "2" - 0 points. In total, a student can receive a maximum of

12 points for writing a medical history and defending it, with a minimum of 7.2 points each. A prerequisite for admission to the exam is the successful completion of computer-based testing and a list of practical skills at the last class in the discipline (maximum 8 points, minimum 4.8 points). The maximum number of points for a student's current academic performance is 120. The minimum (admission to the exam) is 72 points, provided there are no debts. The practice-oriented exam is held according to the schedule during the session. Examination papers contain theoretical questions on various topics and cover all sections of the discipline (oral answer 40 points), 1 case study with questions to it (written answer 40 points). The grade for the exam is assigned according to the traditional 4-point grading system with further conversion to points, with a grade of "5" corresponding to 80 points, "4" - 64 points, "3" - 48 points, "2" - 0 points. The exam is credited to the student if he or she scored at least 48 out of 80 points. Incentive points - 12 points for the defense of a student research paper, 5 points for a conference presentation, 3 points for abstracts, and 5 points for a multimedia presentation. The maximum number of these points should not exceed 12, and the total score in the discipline should not exceed 200. There is a possibility of re-calculating the points obtained in the non-formal education system in accordance with the Regulations.

## 11. Learning resources

11.1 Material and technical support

| | |
|---|---|
| MTS1 | Information and communication systems |
| MTS2 | Library collections |
| MTS3 | Graphic aids (drawings, blueprints, maps, diagrams, posters, etc.) |
| MTS4 | Computers, computer systems and networks |
| MTS5 | Laboratory equipment (chemical, physical, medical, materials and preparations, etc.) |
| MTS6 | Medical facilities/premises and equipment (clinics, hospitals, etc.) |
| MTS7 | Multimedia, video and sound reproduction, projection equipment (video cameras, projectors, screens, smartboards, etc.) |

11.2 Information and methodical support

| **Essential Reading** | |
|---|---|
| 1 | Infectious Diseases edited by O.A. Holubovska, 4th edition / O.A. Holubovska, M.A. Andreichyn, A.V. Shkurba et al. — Kyiv : AUS Medicine Publishing, 2022. |
| 2 | Mandell, Douglas, and Bennett's Principles and Practice of Infectious Diseases, 9th Edition / John E. Bennett, Raphael Dolin, Martin J. Blaser - Elsevier, 2019 |
| **Supplemental Reading** | |
| 1 | Recognition and diagnosis of infectious diseases/Посібник для англомовних студентів медичних вузів, O. Zubach, O.Vorozhbyt // – L'viv: LNMU, 2018. – 95 s. |

| | |
|---|---|
| 2 | Manson's Tropical Diseases, 24th Edition / Jeremy Farrar & Patricia J. Garcia & Peter J Hotez & Thomas Junghanss & Gagandeep Kang & David Lalloo & Nicholas J. White - Elsevier, 2023 |
| 3 | Comprehensive Review of Infectious Diseases, 1st Edition / Andrej Spec & Gerome V. Escota & Courtney Chrisler & Bethany Davies - Elsevier, 2019 |
| 4 | Methodical Instructions for preparation for practical classes on infectious diseases (Module 1) / compilers: M.D.Chemych, N. V. Klimenko, A. G. Lishnevska, V.S. Svitailo – Sumy : Sumy State University, 2023. – 117 p. |
| 5 | Methodical instructions for before class preparation for practical classes in the discpline of “Infectious diseases” (Content module 2) / compilers : M. D. Chemych, V. S. Svitailo, A. G. Lishnevska. – Sumy : Sumy State University, 2023. – 131 p. |
| 6 | Methodical instructons for classroom preparation for practical classes in the discpline “Infectious Diseases” (Content modules 3, 4) / compilers : M. D. Chemych, A. G. Lishnevska, O. M. Chemych. – Sumy : Sumy State University, 2023. – 134 p. |
| 7 | Methodical instructions for before class preparation for practical classes in the discipline of “Infectious diseases” (content module 5) / compilers: M. D. Chemych, D. S. Sosnovenko, A. G. Lishnevska. – Sumy : Sumy State University, 2023. – 95 p. |
| **Web-based and electronic resources** | |
| 1 | http://infection.med.sumdu.edu.ua/ |
| 2 | http://emedicine.medscape.com/infectious_diseases |
| 3 | http://www.atlas-protozoa.com/ |
| 4 | https://phc.org.ua/ |