MINISTRY OF SCIENCE, HIGHER EDUCATION AND INNOVATION OF THE KYRGYZ REPUBLIC

Interstate Educational Organization of Higher Education
Kyrgyz Russian Slavic University named after the first President of the Russian Federation B.N.Yeltsin

ENDORSED by
Dean of the Faculty
ДЕКАНАТ ФАКУЛЬТЕТА
« 20 » November 2025

Infectious diseases including tropical infections

Abstract of discipline (Module)

Assigned to	**Department of Infectious Diseases**
Academic curriculum	560001_24_2 LD ин.plx Specialty: 560001 - KG General medicine (for foreign students)
Mode of study	**intramural**
The course outline was compiled by:	*PhD, associate professor, head of department Kuvatova D.O.*

Course hours scheduling (per semester)

Semester Academic Year	7 (4.1)		8 (4.2)		Total	
Weeks	18		18			
Type of training	AC	CO	CO	CO	AC	CO
Lectures	32	32	32	32	64	64
Practical sessions	64	64	64	64	128	128
Contact work during theoretical training	0,3	0,3			0,3	0,3
Contact work during the examination session			0,5	0,5	0,5	0,5
Including interactive sessions.	4	4	4	4	8	8
Total in-class sessions.	96	96	96	96	192	192
Face-to-face learning	96,3	96,3	96,5	96,5	192,8	192,8
Student's individual work	83,7	83,7	48	48	131,7	131,7
Tests			35,5	35,5	35,5	35,5
Total	180	180	180	180	360	360

1. COURSE OUTLINE OBJECTIVES	
1.1	Formation of knowledge, experiences and practical skills required for early diagnosis of infectious diseases including tropical infections, carrying out of a complex of therapeutic and preventive measures, diagnosis of urgent conditions at the pre- and hospital stages of medical care.

2. THE PLACE OF THE COURSE IN THE EDUCATIONAL PROGRAMM	
Educational program units:	B1.O.03
2.1	**Students' preliminary training requirements:**
2.1.1	Pathophysiology, clinical pathophysiology
2.1.2	Epidemiology
2.1.3	Immunology
2.1.4	Pathological anatomy
2.1.5	Biology, Microbiology, Virology
2.1.6	Propaedeutic therapy
2.1.7	Pharmacology
2.2	**Course units and practical sessions imposing prior Proficiency:**
2.2.1	Family Medicine
2.2.2	Final State Certification
2.2.3	Pediatrics
2.2.4	Outpatient Therapy
2.2.5	Outpatient Surgery
2.2.6	Anesthesiology, Resuscitation, Intensive Care
2.2.7	Hospital Therapy
2.2.8	Hospital Surgery

3. STUDENT'S COMPETENCIES RESULTING FROM THE COURSE UNIT (MODULE)
PC-5: Able and willing to conduct and interpret interviews, physical inspection, clinical examinations, and the results of modern laboratory and instrumental methods, and write medical records for outpatient and inpatient patients of adults and children
Knowledge:
Methods of collecting and analyzing patient complaints, data from his anamnesis, indications and contraindications for additional laboratory and instrumental examination methods.
Skills:
To question, collect complaints and anamnesis of outpatient and inpatient adults and children, using methods and means of medical examination and diagnostic measures.
Expertise:
Skills in prescribing the necessary laboratory and instrumental examination methods in outpatient and inpatient settings, as well as skills in drawing up medical histories and maintaining outpatient cards for adults and children.

PC-8: Able and willing to apply modern information on population health indicators at the healthcare facility level
Knowledge:
Population health indicators, factors shaping human health and the impact of occupational, natural, climatic, and endemic factors on human health.
Skills:
To assess living conditions, a hygienic assessment of the conditions of stay of patients in healthcare facilities, and to conduct a medical and statistical analysis of health and morbidity indicators.
Expertise:
Modern methods of assessing public health and social-hygienic monitoring. Methods of public health education for primary disease prevention.

PC-10: Capable and willing to carry out preventive measures to prevent infectious, parasitic and non-infectious diseases
Knowledge:
The main principles of general and special prevention of infectious, parasitic and non-infectious diseases, sanitary and hygienic and anti-epidemic requirements for medical organizations and public facilities, as well as the methodology for assessing the epidemiological situation, risk factors and risk groups for morbidity.

Skills:
Assess the epidemiological situation in a specific area or among a certain population, plan and implement primary and secondary disease prevention programs, identify risk groups for disease, and develop targeted preventive measures.
Expertise:
Skills in epidemiological analysis and preventive planning, methods of sanitary and anti-epidemic measures in infectious disease foci, methods of early detection of signs of potential epidemic threats, as well as practical skills in the prevention of parasitic diseases (disinfection, disinsection, deratization), technologies for the prevention of non-communicable diseases (screenings, patient routing).

PC-13: Capable and ready to carry out anti-epidemic measures, protect the population in areas of highly dangerous infections, in the event of deterioration of the radiation situation and natural disasters and other emergency situations
Knowledge:
Fundamentals of organizing anti-epidemic measures in outbreaks of highly dangerous infections (plague, cholera, anthrax, etc.), algorithms for localization and elimination of outbreaks. Principles of civil defense and medical protection of the population in natural, man-made, and biological emergencies.
Skills:
Assess the epidemiological, radiation, and sanitary-hygienic situation, and determine the level of threat to the population and medical personnel. Organize and implement primary anti-epidemic measures: isolation, quarantine, disinfection, deratization, evacuation, and sanitization of the population. Provide medical assistance to victims of emergencies in cooperation with the Ministry of Emergency Situations and other services.
Expertise:
Skills in the use of personal and collective protective equipment, infection control methods, sanitization, and disinfection. Methods for rapid sanitary and epidemiological investigation of highly dangerous infection outbreaks and conducting epidemiological surveillance in emergency situations. Algorithms for planning, coordinating, and implementing measures to protect the population and medical personnel during quarantine, evacuation, and emergency response.

PC-14: Capable and ready to make a diagnosis based on the results of biochemical and clinical studies, taking into account disorders in organs, systems and the entire body
Knowledge:
Normal and abnormal clinical and biochemical parameters of blood, urine, and other biological fluids, and their diagnostic value. Pathophysiological mechanisms of laboratory parameter changes in diseases of organs and systems (liver, kidneys, heart, endocrine system, etc.). Fundamentals of clinical laboratory diagnostics: stages of diagnosis, differential diagnosis, and clinical reasoning algorithms.
Skills:
Interpret the results of clinical and biochemical tests, considering the clinical picture and the course of the disease. Establish a preliminary and final diagnosis based on a combination of laboratory data, medical history, and physical examination results. Conduct differential diagnostics, determine the need for additional testing, and formulate a final diagnosis.
Expertise:
Skills in analyzing and summarizing laboratory data in clinical practice using modern diagnostic algorithms. Methods for comprehensively assessing the functional state of organs and systems based on laboratory test results. Clinical decision-making techniques for choosing diagnostic tactics and substantiating a diagnosis based on evidence-based medicine.

PC-16: Able and willing to use a diagnostic algorithm (primary, secondary, and complication diagnoses) taking into account the ICD, and perform basic diagnostic procedures to identify urgent and life-threatening conditions
Knowledge:
Principles of clinical diagnostics: stages of diagnosis, diagnosis structure (primary disease, comorbidities, complications), and rules for formulating a diagnosis. The International Classification of Diseases (ICD), its structure, and rules for coding diseases and conditions. Clinical signs and pathogenetic mechanisms of the development of emergencies and life-threatening conditions (shock, myocardial infarction, pulmonary embolism, stroke, acute respiratory failure, etc.).
Skills:
Apply diagnostic algorithms based on complaints, medical history, physical examination data, laboratory and instrumental studies. Formulate a clinical diagnosis considering the requirements of the ICD and disease classification rules. Recognize emergency conditions, conduct a primary diagnosis, and assess the severity of the patient's condition.
Expertise:
Skills in coding diagnoses according to the ICD, considering the underlying disease, comorbidities, and complications. Diagnostic search algorithms for acute and life-threatening conditions and methods for their early detection. Clinical decision-making and patient triage methods in emergency care settings.

PC-17: Capable and ready to perform basic treatment measures for the most common diseases and conditions in adults and children in outpatient and inpatient settings
Knowledge:
Principles of diagnosis and treatment of the most common diseases in adults and children. Fundamentals of drug therapy: pharmacodynamics and pharmacokinetics of the main drug groups, rules for their prescription, dosage, and possible side effects. Algorithms for providing medical care in outpatient and inpatient settings, standards and clinical guidelines for primary, specialized, and
Skills:
Assess the patient's condition, formulate a diagnosis, and determine treatment strategies in accordance with established standards. Prescribe and adjust medication therapy, perform therapeutic procedures (injections, infusion therapy, bandaging, ECG, etc.). Provide first aid and emergency medical care for acute illnesses and conditions, including life-threatening ones.
Expertise:
Skills in performing basic treatment procedures in outpatient and inpatient settings (infusion therapy, oxygen therapy, local treatment, symptomatic therapy). Individualized treatment methods based on the patient's age, disease stage, comorbidities, and risk factors. Skills in monitoring the effectiveness and safety of therapy, assessing the patient's progress, and preventing complications.

PC-19: Capable and ready to provide first aid in emergency and life-threatening conditions, and refer patients for hospitalization on a planned and emergency basis
Knowledge:
Diagnostic criteria and clinical signs of emergency and life-threatening conditions (acute respiratory failure, anaphylactic shock, myocardial infarction, stroke, massive bleeding, etc.). Principles of providing first aid and emergency medical care in accordance with current standards and clinical guidelines. Patient routing procedures, indications for planned and emergency hospitalization, and rules for interaction with emergency medical services and hospitals.
Skills:
Quickly assess the patient's condition and prioritize medical interventions. Provide first aid in emergency situations: administer CPR, manage acute pain, stop external bleeding, provide anti-shock measures, and ensure airway patency. Complete medical documentation and refer to the patient for planned or emergency hospitalization, justifying the need.
Expertise:
Skills in applying first aid and emergency treatment algorithms under time and resource constraints. Clinical decision-making methods in emergency situations and rules for organizing safe patient transportation. Skills in interacting with emergency medical teams, hospitalization services, and inpatient facilities to ensure timely medical care for the patient.

Final student's competences

3.1	Knowledge:
methods of collecting and analyzing patient complaints, data from his anamnesis, indications and contraindications for additional laboratory and instrumental examination methods.	
Population health indicators, factors shaping human health and the impact of occupational, natural, climatic, and endemic factors on human health.	
The main principles of general and special prevention of infectious, parasitic and non-infectious diseases, sanitary and hygienic and anti-epidemic requirements for medical organizations and public facilities, as well as the methodology for assessing the epidemiological situation, risk factors and risk groups for morbidity.	
Fundamentals of organizing anti-epidemic measures in outbreaks of highly dangerous infections (plague, cholera, anthrax, etc.), algorithms for localization and elimination of outbreaks. Principles of civil defense and medical protection of the population in natural, man-made, and biological emergencies.	
Normal and abnormal clinical and biochemical parameters of blood, urine, and other biological fluids, and their diagnostic value. Pathophysiological mechanisms of laboratory parameter changes in diseases of organs and systems (liver, kidneys, heart, endocrine system, etc.). Fundamentals of clinical laboratory diagnostics: stages of diagnosis, differential diagnosis, and clinical reasoning algorithms.	
Principles of clinical diagnostics: stages of diagnosis, diagnosis structure (primary disease, comorbidities, complications), and rules for formulating a diagnosis. The International Classification of Diseases (ICD), its structure, and rules for coding diseases and conditions. Clinical signs and pathogenetic mechanisms of the development of emergencies and life-threatening conditions (shock, myocardial infarction, pulmonary embolism, stroke, acute respiratory failure, etc.).	
Principles of diagnosis and treatment of the most common diseases in adults and children. Fundamentals of drug therapy: pharmacodynamics and pharmacokinetics of the main drug groups, rules for their prescription, dosage, and possible side effects. Algorithms for providing medical care in outpatient and inpatient settings, standards and clinical guidelines for primary, specialized, and emergency care.	
Diagnostic criteria and clinical signs of emergency and life-threatening conditions (acute respiratory failure, anaphylactic shock, myocardial infarction, stroke, massive bleeding, etc.). Principles of providing first aid and emergency medical care in accordance with current standards and clinical guidelines. Patient routing procedures, indications for planned and emergency hospitalization, and rules for interaction with emergency medical services and hospitals.	

3.2	Skills:
to question, collect complaints and anamnesis of outpatient and inpatient adults and children, using methods and means of medical examination and diagnostic measures.	
to assess living conditions, a hygienic assessment of the conditions of stay of patients in healthcare facilities, and to conduct a medical and statistical analysis of health and morbidity indicators.	
Assess the epidemiological situation in a specific area or among a certain population, plan and implement primary and secondary disease prevention programs, identify risk groups for disease, and develop targeted preventive measures.	
Assess the epidemiological, radiation, and sanitary-hygienic situation, and determine the level of threat to the population and medical personnel. Organize and implement primary anti-epidemic measures: isolation, quarantine, disinfection, deratization, evacuation, and sanitization of the population. Provide medical assistance to victims of emergencies in cooperation with the Ministry of Emergency Situations and other services.	
Interpret the results of clinical and biochemical tests, considering the clinical picture and the course of the disease. Establish a preliminary and final diagnosis based on a combination of laboratory data, medical history, and physical examination results. Conduct differential diagnostics, determine the need for additional testing, and formulate a final diagnosis.	
Apply diagnostic algorithms based on complaints, medical history, physical examination data, laboratory and instrumental studies. Formulate a clinical diagnosis considering the requirements of the ICD and disease classification rules. Recognize emergency conditions, conduct a primary diagnosis, and assess the severity of the patient's condition.	
Assess the patient's condition, formulate a diagnosis, and determine treatment strategies in accordance with established standards. Prescribe and adjust medication therapy, perform therapeutic procedures (injections, infusion therapy, bandaging, ECG, etc.). Provide first aid and emergency medical care for acute illnesses and conditions, including life-threatening ones.	
Quickly assess the patient's condition and prioritize medical interventions. Provide first aid in emergency situations: administer CPR, manage acute pain, stop external bleeding, provide anti-shock measures, and ensure airway patency. Complete medical documentation and refer to the patient for planned or emergency hospitalization, justifying the need.	
3.3	Expertise:
Skills in prescribing the necessary laboratory and instrumental examination methods in outpatient and inpatient settings, as well as skills in drawing up medical histories and maintaining outpatient cards for adults and children.	
Modern methods of assessing public health and social-hygienic monitoring. Methods of public health education for primary disease prevention.	
Skills in epidemiological analysis and preventive planning, methods of sanitary and anti-epidemic measures in infectious disease foci, methods of early detection of signs of potential epidemic threats, as well as practical skills in the prevention of parasitic diseases (disinfection, disinsection, deratization), technologies for the prevention of non-communicable diseases (screenings, patient routing).	
Skills in the use of personal and collective protective equipment, infection control methods, sanitization, and disinfection. Methods for rapid sanitary and epidemiological investigation of highly dangerous infection outbreaks and conducting epidemiological surveillance in emergency situations. Algorithms for planning, coordinating, and implementing measures to protect the population and medical personnel during quarantine, evacuation, and emergency response.	
Skills in analyzing and summarizing laboratory data in clinical practice using modern diagnostic algorithms. Methods for comprehensively assessing the functional state of organs and systems based on laboratory test results. Clinical decision-making techniques for choosing diagnostic tactics and substantiating a diagnosis based on evidence-based medicine.	
Skills in coding diagnoses according to the ICD, considering the underlying disease, comorbidities, and complications. Diagnostic search algorithms for acute and life-threatening conditions and methods for their early detection. Clinical decision-making and patient triage methods in emergency care settings.	
Skills in performing basic treatment procedures in outpatient and inpatient settings (infusion therapy, oxygen therapy, local treatment, symptomatic therapy). Individualized treatment methods based on the patient's age, disease stage, comorbidities, and risk factors. Skills in monitoring the effectiveness and safety of therapy, assessing the patient's progress, and preventing complications.	
Skills in applying first aid and emergency treatment algorithms under time and resource constraints. Clinical decision-making methods in emergency situations and rules for organizing safe patient transportation. Skills in interacting with emergency medical teams, hospitalization services, and inpatient facilities to ensure timely medical care for the patient.	