## International Institute of Medical Education and Cooperation

## SPECIALIST DEGREE PROGRAMME 31.05.01 'GENERAL MEDICINE'

# COURSE (MODULE) 'Tropical diseases'

### **OVERVIEW**

Mode of study full time

Faculty International Institute of Medical Education and Cooperation

Department Infectious diseases

Year 5

Semester – 9 – **Tropical diseases** (72 ac.h.) \*ac. h. – academic hours

Lectures – 8 ac.h.

Final test – 9 semester (4 ac.h.)

Practical classes 30 ac.h Self-study 30 ac.h Final test 4 ac.h.

Total workload 72 ac.h (2 credits)

The course (module) is devised according to FSES HE requirements approved on February,9, 2016 by Order of Ministry of Health, Russian Federation) and vocational functions of General Practitioner (primary care physician, district doctor) Professional Standard.

#### 1. THE COURSE AIM AND SCOPE

#### The aim:

- mastering the knowledge of scientific directions in infectious pathology, various schools and concepts, theoretical foundations and laws in infectious diseases, specifics, principles of methodology and methods of their study;
- ensuring the acquisition of knowledge and practical skills necessary for the diagnosis, treatment and prevention of the most common infectious diseases (tropical infections);
- formation of modern ideas about the etiology, pathogenesis, and clinical manifestations of infectious diseases (tropical infections);
- formation of clinical thinking, consolidation and improvement of the ability to independently establish and justify a clinical diagnosis, use methods of differential diagnosis, resolve issues of treatment and prevention in patients with typical forms of the main, most frequently observed infectious diseases (tropical infections);
- knowledge of diagnostics and treatment of emergency conditions in tropical diseases;
- knowledge of the basics of pharmacotherapy of the main nosological forms, the study of the principles of rational pharmacotherapy;
- formation of skills of relationship with the patient using the rules of medical ethics and medical deontology.

#### The course focuses on

- terminology, methodological principles and basic areas of tropical diseases;
- formation of the future doctor's clinical thinking on the etiology, pathogenesis and clinical manifestations of infectious diseases;
- implementation of measures to form a motivated attitude of adults and adolescents to the preservation and strengthening of their health and the health of others;
- carrying out preventive and anti-epidemic measures aimed at preventing the occurrence of infectious diseases;
- to carry out dispensary monitoring of the adult population and adolescents, taking into account age, gender and initial state of health, to carry out measures aimed at improving the effectiveness of dispensaries among decreed contingents and chronic patients;
- diagnostics of diseases and pathological conditions in adults and adolescents based on the possession of propaedeutic and laboratory-instrumental research methods;
- diagnostics of emergency conditions in adults and adolescents;
- providing first-aid and medical care to adults and adolescents in emergency situations;
- carrying out medical evacuation measures in an emergency situation and provide medical assistance to adults and adolescents in extreme conditions of epidemics, in centers of mass destruction;
- formation of motivation in the adult population, adolescents and their family members to introduce elements of a healthy lifestyle, including the elimination of harmful habits that adversely affect the health of the younger generation;
- choice of medication and non-medication therapy for patients with infectious diseases;
- maintain accounting and reporting medical documentation in medical organizations.

# 2. THE COURSE POSITION IN SPECIALIST DEGREE PROGRAMME 31.05.01 'GENERAL MEDICINE'

The course 'Tropical diseases' is taught in the block of professional subjects of 'General Medicine'

*The background knowledge for the course has been taught in \at* 

- Basic subjects: Bioethics; History of Medicine; Latin language; Psychology and Pedagogy; Medical Informatics; Biochemistry; Anatomy; Pathological Anatomy, Clinical Pathological Anatomy;

Histology, Embryology, Cytology; Normal Physiology; Pharmacology; Pathophysiology, Clinical Pathophysiology; Hygiene; Public Health and Healthcare, Health Economics; Dermatovenerology; Neurology, Medical Genetics; Otorhinolaryngology; Ophthalmology; Life safety; Disaster medicine; Propaedeutics of Internal Diseases; Hospital therapy.

- Variable subjects: Infectious diseases, Microbiology, Immunology, Bacteriology, Virology, Epidemiology

#### OUTCOME COMPETENCIES OF THE COURSE

On completing the course a student is expected to:

- 1. Know: ethical and deontological aspects of medical activity in communication with colleagues, secondary and junior medical staff, adults and adolescents, their parents and relatives; etiology, pathogenesis and prevention of the most common infectious diseases; modern methods of clinical, laboratory, and instrumental examination of infectious patients; maintenance of standard accounting and reporting medical documentation in medical organizations; pathogenesis of infectious diseases, their main clinical manifestations; criteria for the diagnosis of infectious diseases; the clinical picture, features of the course and possible complications of the most common infectious diseases that occur in a typical form in different age groups; modern classification of infectious diseases; diagnostic methods, diagnostic capabilities of methods of direct investigation of the patient's infectious profile; main methods of laboratory and instrumental diagnostics used in infectology (indications for use, theoretical basis of the method, interpretation of results); indications for hospitalization of an infectious patient; basic principles of treatment of infectious diseases and rehabilitation of patients; treatment methods and indications for their use; indications for outpatient treatment of an infectious patient; principles of medical examination of the population, rehabilitation of patients and over-ill; methods of conducting urgent actions; specific and non-specific prevention of infectious diseases; transportation of an infectious patient to a hospital: isolation rules for hospitalization of patients, sanitary and hygienic requirements for the device, organization of work and mode of infectious hospitals, departments, boxes; features of the organization of work with patients with HIV infection.
- 2. To be able to apply the methods of clinical science in various types of professional and social activities that are used in practice; apply ethical and deontological aspects of medical activity in communication with colleagues, secondary and junior medical staff, adults and adolescents, their parents and relatives; determine the patient's status: collect anamnesis, conduct a survey of the patient and / or his relatives, conduct a physical examination of the patient (examination, palpation, auscultation, measurement of blood pressure, determination of the properties of the arterial pulse, etc.); conduct an initial examination of systems and organs: nervous, endocrine, immune, respiratory, cardiovascular, blood and hematopoietic organs, digestive, urinary, reproductive, musculoskeletal and joints, eyes, ears, throat, nose; fill in your medical history; make a preliminary diagnosis-synthesize information about the patient in order to determine the pathology and its causes; plan the amount of additional research in accordance with the prognosis of the disease, to clarify the diagnosis and obtain a sufficient result; formulate a clinical diagnosis; develop an action plan, taking into account the course of the disease and its treatment; evaluate the patient's condition in order to make a decision about the need for medical care; choose an individual type of care for the treatment of the patient in accordance with the situation: primary care, hospitalization; use various methods of drug administration; formulate indications for the chosen method of treatment, taking into account etiotropic and pathogenetic agents; determine the route of administration, mode and dose of medications, evaluate the effectiveness and safety of the treatment; write a prescription; provide first aid in emergency situations, first aid to victims in lesions in emergency situations.

**3. To provide**: methods of clinical sciences in various types of professional and social activities used in practice; ethical and deontological aspects of medical practice; activities in communication with colleagues, secondary and junior medical staff, adults and adolescents, their parents and relatives; methods of general clinical examination; interpretation of results of laboratory and instrumental diagnostic methods; correct maintenance of medical records; algorithm for making a preliminary diagnosis and then referring the patient to the appropriate specialist doctor; algorithm for a detailed clinical diagnosis; basic medical and diagnostic measures; algorithm for choosing medication and non-medication therapy for patients with infectious diseases; the main medical diagnostic and therapeutic measures to provide first aid in emergency and life-threatening conditions.

Learning outcomes	Competency developed: a	Competency
	description of (compulsory)	code
	threshold level	
1	2	3
A student knows:	- ability and readiness to implement	GPC-4
- ethical and deontological principles of	ethical and deontological principles in	
medical activity in communication with	professional activities	
colleagues, secondary and junior medical		
personnel, adults and adolescents, their		
parents and relatives		
A student is able to:		
- apply ethical and deontological aspects		
of medical activity in communication with		
colleagues, secondary and junior medical		
staff, adults and adolescents, their parents		
and relatives		
A students uses:		
- ethical and deontological aspects of		
medical activity in communication with		
colleagues, secondary and junior medical		
staff, adults and adolescents, their parents		
and relatives.		
A student knows:	readiness to maintain medical	GPC-6
- rules for maintaining approved medical	documentation	
documentation		
A student is able to:		
- maintain approved medical records		
A students uses:		
- maintenance of the approved medical		
documents		
A student knows:	readiness to use medicines and other	GPC-8
- medicines used in solving professional	substances and their combinations in	
tasks	solving professional tasks	
A student is able to:		
- apply medications and other substances		
and their combinations in solving		

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professional tasks		
A students uses:		
- algorithm for prescribing medicines and		
other substances and their combinations in		
solving professional tasks.		
A student knows:	readiness to provide organization of	GPC-10
- principles of organization of patient care;	patient care and primary pre-medical	
- methods of providing primary pre-	care	
medical care		
A student is able to:		
- organize patient care;		
- conduct primary pre-medical care		
A students uses:		
- methods of organization of patient care;		
- methods for providing primary pre-		
medical health care.		
A student knows:	willingness to collect and analyze	PC-5
- etiology, pathogenesis and prevention of	patient complaints, medical history,	
the most common infectious diseases;	examination results, laboratory,	
- modern methods of clinical, laboratory,	instrumental, pathologic-anatomical	
and instrumental examination of infectious	and other studies in order to recognize	
patients;	the condition or establish the presence	
- maintaining standard accounting and	or absence of the disease	
reporting medical documentation in		
medical organizations.		
A student is able to:		
- determine the patient's status: collect		
anamnesis, conduct a survey of the patient		
and / or his relatives, conduct a physical		
examination of the patient (examination,		
palpation, auscultation, measurement of		
blood pressure, determination of the		
properties of the arterial pulse, etc.);		
- conduct an initial examination of systems		
and organs: nervous, endocrine, immune,		
respiratory, cardiovascular, blood and		
hematopoietic organs, digestive, urinary,		
reproductive, musculoskeletal and joints,		
eyes, ears, throat, nose;		
- fill out your medical history.		
A students uses:		
- methods of general clinical examination;		
- interpretation of results of laboratory and		
instrumental diagnostic methods;		
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- proper maintenance of medical records.		

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A student knows:	the ability to determine the patient's	PC-6
- modern classification of infectious	main pathological conditions,	
diseases;	symptoms, disease syndromes,	
- diagnostic methods, diagnostic	nosological forms in accordance with	
capabilities of methods of direct	the International statistical	
investigation of the patient's infectious	classification of diseases and health-	
profile;	related problems, X revision	
- the main methods of laboratory and		
instrumental diagnostics used in		
infectology (indications for use, theoretical		
basis of the method, interpretation of the		
results).		
A student is able to:		
- formulate a clinical diagnosis;		
- develop an action plan, taking into		
account the course of the disease and its		
treatment.		
A students uses:		
- algorithm for a detailed clinical		
diagnosis;		
- basic medical diagnostic measures.		
A student knows:	readiness to manage and treat patients	PC-9
- indications for hospitalization of an	with various nosological forms in	
infectious patient;	outpatient and day hospital settings	
- basic principles of treatment of infectious		
diseases and rehabilitation of patients;		
- treatment methods and indications for		
their use;		
- indications for outpatient treatment of an		
infectious patient.		
A student is able to:		
- evaluate the patient's condition in order		
to make a decision about the need for		
medical care;		
- choose an individual type of care for the		
treatment of the patient in accordance with		
the situation: primary care, hospitalization;		
- use various methods of drug		
administration;		
- formulate indications for the chosen		
method of treatment, taking into account		
etiotropic and pathogenetic agents;		
- determine the route of administration,	i	l
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mode and dose of medications, evaluate		
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- write a prescription.		
A students uses:		
- algorithm for choosing medication and		
non-medication therapy for patients with		
infectious diseases.		
A student knows:	readiness to participate in providing	PC-13
- methods of conducting urgent actions;	medical assistance in emergency	
- specific and non-specific prevention of	situations, including participation in	
infectious diseases;	medical evacuation	
- transportation of an infectious patient to		
a hospital: isolation rules for		
hospitalization of patients, sanitary and		
hygienic requirements for the device,		
organization of work and mode of		
infectious hospitals, departments, boxes;		
- features of the organization of work with		
patients with HIV infection.		
A student is able to:		
- provide first aid in emergency situations,		
first aid to victims in lesions in emergency		
situations.		
A students uses:		
- the main medical diagnostic and		
therapeutic measures to provide first aid in		
emergency and life-threatening conditions.		

# 4. THE COURSE (MODULE) 'Tropical diseases' SYLLABUS AND CONTENTS

# 4.1 Total workload is 2 credits (72 ac.h.)

№	Part (Module)	iter	semester	Study forms (including self-study and workload in ac.h.)				Formative assessment (weekly) Summative assessment (by semesters)
		semester	Week of the	Lectur es	Practical classes	Semin ars	Self- study	
1	Tropical diseases	9		8	30	-	30	Q T C A Final test (4 ac.h)
	Total	9		8	30	-	30	Q T C A Final test (4 ac.h)

Q - Questions, T -Test, C - Cases, A - Algorythms of performance