



## INTERNATIONAL SCHOOL OF MEDICINE

### SYLLABUS

<b>Program:</b>	<b>General medicine</b>
<b>Qualification of the graduate:</b>	<b>General practitioner / Medical doctor</b>
<b>Year:</b>	<b>2022-2023</b>
<b>Semester:</b>	<b>9</b>
<b>Course duration:</b>	<b>18 weeks</b>
<b>Instructor/Assistant/Professor</b>	<b>Kanybek k Altynai</b>
<b>Department:</b>	<b>Infectious diseases</b>
<b>Day and Time for consultation:</b>	
<b>Classroom:</b>	
<b>e-mail:</b>	<b><a href="mailto:01altmalai@gmail.com">01altmalai@gmail.com</a></b>
<b>Course Title:</b>	<b>Tropical medicine</b>
<b>Must/Elective:</b>	
<b>Credit/Hours:</b>	<b>2/72</b>
<b>Course Description:</b>	<p>The goal of teaching the discipline "Tropical and parasitic diseases" for foreign citizens is the formation of students' academic, social, personal and professional competencies to provide medical care to patients with infectious diseases, widespread in conditions of hot and humid climates, bites of poisonous animals and other factors.</p>
<b>Course Objectives:</b>	<p>The tasks of teaching the discipline are to form students' scientific knowledge necessary for:</p> <ul style="list-style-type: none"><li>• diagnostics of tropical and parasitic diseases based on anamnestic, clinical and laboratory-instrumental research methods;</li><li>• differential diagnosis with other infectious and non-infectious diseases proceeding with similar symptoms, based on their leading syndromes;</li><li>• etiologic and pathogenetic treatment of tropical infectious diseases;</li><li>• predicting the development and diagnosis of emergency conditions in tropical infectious diseases and the provision of emergency medical care;</li><li>• carrying out specific and non-specific prophylaxis of tropical infectious diseases;</li><li>• the provision of medical care and the organization of anti-epidemic measures in emergency situations associated with the spread of infectious tropical diseases.</li></ul>

<b>Prerequisites:</b>	The discipline "Tropical infectious diseases "is studied by students of the specialty Medicine (for foreign citizens) and is included in the variable part of C.3. in the professional block of the studied disciplines of the State Higher Educational Institution.
<b>Post-requisites:</b>	<p>The content of Tropical Infection is based on the content of such prior disciplines as:</p> <p>Histological: examination of a biopsy under a microscope.</p> <ul style="list-style-type: none"> <li>• microbiology: morphology of pathogenic and opportunistic microorganisms for the human body and their actions, virulence and general patterns of development of infectious processes.</li> <li>• about biochemistry of development: the chemical nature of infection, as well as the chemical processes underlying the vital activity of infectious agents and the interaction of the body with their functions.</li> <li>• about the physiology of infection: its life in the human body.</li> <li>• about the pathophysiology of infection: the main patterns of occurrence, development and outcome of infectious pathology. Pathogenesis of inflammatory and allergic reactions, as well as the pathogenesis of autoimmune processes.</li> <li>• in pharmacology: medicines belonging to the groups of antiviral, antifungal, antimicrobial, antihistamines, anti-inflammatory, desensitizing, tonic agents, as well as others in terms of the composition of medicines. Epidemiology: Epidemics and Outbreaks. Epidemic focus.</li> <li>• in epidemiological examination of the epidemic focus. Three main groups</li> </ul> <p>preventive and anti-epidemic measures. Their comparative assessment. Previously</p> <p>identification and isolation of infectious patients. Epidemiological significance of early</p> <p>isolation. Disinfection is current, final and prophylactic. Physical and</p> <p>chemical disinfection methods. Specific prophylaxis of infectious</p>
<b>Learning Outcomes: (expected knowledge &amp; ability at the end)</b>	<p>Requirements for the results of studying the discipline</p> <p>After studying the discipline, the student must</p> <p>know:</p>

- general features of regions, conditions (epidemiological, ethnic), contributing to the spread of tropical infectious diseases;
  - links of the epidemic process in tropical infectious diseases;
  - etiology, pathogenesis, clinical picture, course features, complications and outcomes of the most common tropical infectious diseases;
  - features of the most common ubiquitous infections in countries with a tropical climate;
  - methods for the diagnosis of tropical infectious diseases using the syndromic approach and epidemiological and clinical laboratory data;
  - principles of treatment of tropical infectious diseases;
  - principles and methods of prevention of tropical infectious diseases;
  - modern methods of providing emergency medical care to patients with severe and / or complicated course and ubiquitous infectious diseases;
  - organization of urgent anti-epidemic measures for tropical infectious diseases;
- be able to:
- examine a patient with an infectious pathology (examination, percussion, palpation, auscultation);
  - to determine the leading syndrome and diagnosis of the most common and socially significant tropical diseases;
  - to measure the diagnosis of tropical diseases with noncommunicable diseases by the leading syndrome;
  - determine and prescribe laboratory and instrumental studies necessary for the diagnosis;
  - to formulate a detailed clinical diagnosis of the disease in accordance with the international classification of diseases;
  - to evaluate and interpret the results of the patient examination (clinical, biochemical, bacteriological, serological analyzes, X-ray examination, etc.);
  - choose the optimal treatment tactics for a particular patient, prescribe individual etiotropic therapy, taking into

account the activity, natural and regional sensitivity of drugs;

- prescribe pathogenetic therapy adequate to the patient's condition;

- to identify and stop urgent conditions complicating the course of tropical and ubiquitous infectious diseases;

- to carry out dynamic monitoring of a patient with a tropical infectious pathology in the stage of convalescence and in chronic disease;

- to organize anti-epidemic and preventive measures in the focus of an infectious disease, taking into account the characteristics of the region;

own:

- skills of collecting anamnesis (including epidemiological);

- the skills of physical examination of a patient with a tropical infectious disease;

- skills in assessing the results of clinical, laboratory and instrumental methods for diagnosing infectious diseases;

- the skills of making a clinical diagnosis in an infectious tropical disease;

- the skills of performing the main diagnostic and therapeutic measures in the provision of medical care at the pre-hospital stage with infectious-toxic, hypovolemic, anaphylactic shock; hepatic coma; acute renal failure, intestinal bleeding, pulmonary edema; laryngeal edema; swelling of the brain; bulbar disorders;

- the skill of filling out medical documentation for the initial detection of a patient with a tropical infection;

- the skill of organizing preventive and anti-epidemic measures in the focus of infection;

- the skill of taking biological material for bacteriological, virological, serological, biochemical and other studies of studies of thick drops and blood smears for testing for malaria);

- the skill of gastric lavage;

- the skill of sigmoidoscopy;

- the skill of performing a spinal puncture.

<b>Basic references:</b>	
<b>Supplementary Textbook and Materials:</b>	<p>Basic literature</p> <ol style="list-style-type: none"> <li>1. Bronstein, AM Tropical diseases and medicine of travelers' diseases: [manual] / AM Bronstein. - M.: GEOTAR-Media, 2014 .-- 528 p.</li> <li>2. Infectious Diseases: Leadership / Ed. V.M.Semenova. - M.: Med. lit., 2014 .-- 496 p.</li> <li>3. Matievskaya, NV Tropical and parasitic diseases = Tropical and parasitic diseases: a manual for faculty students. foreign students (English language teaching) / N. V. Matievskaya, D. A. Zhmakin. - Grodno: GrSMU, 2014 .-- 378 p.</li> <li>4. Tropical and parasitic diseases: textbook / SV Lark [and others]. - Minsk: Higher school, 2014 - 400 p.</li> <li>5. Viral and bacterial intestinal infections in general medical practice: a methodological guide / TI Dmitrachenko et al. - Minsk: Tiras-N. - 2018 .-- 52 p.</li> <li>6. Krasavtsev, EL Hemorrhagic fevers: study guide. manual for 4-6-year students of the medical faculty, the faculty for training specialists for foreign countries, 4-5 courses of the medical-diagnostic faculty of medical universities / E. L. Krasavtsev, V. M. Mitsura. - Gomel: GomGMU, 2017 .-- 68 p.</li> <li>7. Medical parasitology and parasitic diseases: textbook. allowance: for students of institutions of higher education. prof. education / A. B. Khojayan [and others]; ed. A. B. Khojayan, S. S. Kozlova, M. V. Golubeva. - M.: GEOTAR-Media, 2014 .-- 446 p.</li> <li>8. Myandina, GI Medical parasitology: textbook. allowance: for students studying in the specialties of higher. prof. Education group Healthcare / G. I. Myandina, E. V. Tarasenko. - Moscow: Practical Medicine, 2013 .-- 251 p.</li> <li>9. Tropical Infectious Diseases: Principles, Pathogens and Practice / Ed. by R. L. Guerrant, D. H. Walker, P. F. Weller. - 3rd ed. - Elsevier Inc., 2011 .-- 1023 p.</li> <li>10. The list of resources of the information and telecommunication network "Internet" necessary for the development of the discipline: <ul style="list-style-type: none"> <li>- <a href="http://www.kyrlibnet.kg">www.kyrlibnet.kg</a>.</li> <li>- <a href="http://www.iprbookshop.ru">www.iprbookshop.ru</a>.</li> </ul> </li> </ol>

	<ul style="list-style-type: none"> <li>- <a href="http://www.consilium-medicum.com">www.consilium-medicum.com</a>.</li> <li>- <a href="http://www.medportal.ru">www.medportal.ru</a>.</li> <li>- <a href="http://www.studmedlib.ru">www.studmedlib.ru</a>.</li> <li>- <a href="http://www.nejm.org">http://www.nejm.org</a>/-The</li> <li>- <a href="https://t.me/vasha_kozhka">t.me/vasha_kozhka</a> -<a href="http://www.clinicianreviews.com">http://www.clinicianreviews.com</a></li> </ul>
--	---

### COURSE POLICY AND EVALUATION CRITERIA:

Type of control (current, milestone, final)	Control form	Assessment of learning outcomes
Attendance	For one missed lesson minus 2 points	20 points
Current control	Oral survey, written work	20 points
IWS+IWW	Performing assignments, work with literature	20 points
Milestone control (modul submission)	Testing, control tasks	40 points
Final control (differential test)	Conversation, examination (test.edu.kg)	100 points

Scale of correspondence between grades and scores on the final control (exam)	
Score	Grade
90-100	«excellent»
76-89	«good»
60-75	«satisfactory»
0-59	«unsatisfactory»

Course Plan	Lecture / Practice	Subject
1 week	Practice Lecture	Introduction to Tropicology. History of science, stages of development. Types climatic zones.  Malaria. Types of malaria. The etiology and pathogenesis.
2 week	Practice Lecture	Malaria. Types of malaria. Features of the etiology and pathogenesis.  Clinical features. Diagnostics. Dif. diagnostics. Chlorine resistance. Relapses of malaria.
3 week	Practice Lecture	Severe and complicated malaria, treatment. Prevention of malaria.  Filariasis. Dracunculiasis. Diagnosis. Treatment

4 week	<b>Practice</b>	<b>Filariasis. Dracunculiasis. Diagnosis. Treatment.</b>
	<b>Lecture</b>	<b>Tropical rickettsioses. Clinic, diagnostics, treatment</b>
5 week	<b>Practice</b>	<b>Tropical rickettsioses. Clinic, diagnostics, treatment.</b>
	<b>Lecture</b>	Rabies. Clinical, diagnostics, treatment
<b>Modul 1 (Date)</b>		
6 week	<b>Practice</b>	<b>Rabies. Clinic, diagnostics, treatment</b>
	<b>Lecture</b>	<b>Leishmaniasis, etiology, pathogenesis, clinical, diagnostics, treatment</b>
7 week	<b>Practice</b>	<b>Leishmaniasis. Geographic distribution. Etiology, pathogenesis, clinical picture, diagnostics. Treatment.</b>
	<b>Lecture</b>	<b>Trypanosomiasis. Types. Clinical. Diagnostic. Treatments</b>
8 week	<b>Practice</b>	<b>Trypanosomiasis. African trypanosomiasis. American trypanosomiasis. Clinic, diagnostics. Treatment.</b>
	<b>Lecture</b>	<b>Amebiasis, balantidiasis, giardiasis.</b>
9 week	<b>Practice</b>	<b>Amebiasis, balantidiasis, giardiasis. Clinic, diagnostics, treatment. Differential diagnosis of hemato-diarrhea the tropics.</b>
	<b>Lecture</b>	<b>Brucellosis. Plague. Tularemia. Listeriosis</b>
10 week	<b>Practice</b>	<b>The most important zoonotic bacteriosis in the tropics (brucellosis, plague, tularemia, listeriosis, etc.).</b>
	<b>Lecture</b>	<b>Borreliosis. Clinic, diagnostics, treatment</b>
<b>Modul 2 (Date)</b>		
11 week	<b>Practice</b>	<b>Borreliosis Clinic, diagnosis, treatment.</b>
	<b>Lecture</b>	<b>Snake toxins scorpions. Bites of poisonous animals and insect.</b>
12 week	<b>Practice</b>	<b>Bites of poisonous animals and insects. Snake toxins scorpions, etc.</b>
	<b>Lecture</b>	<b>Schistosomes, flukes, tape helminths.</b>
13 week	<b>Practice</b>	<b>Flat helminths (schistosomes, flukes, tape helminths). Diagnosis. Treatment.</b>
	<b>Lecture</b>	<b>Leprosy. Miasas</b>
14 week	<b>Practice</b>	<b>Leprosy. Miasas.</b>
	<b>Lecture</b>	<b>Arbovirus infection. Fever encephalitis. Hemorrhagic fevers</b>
<b>Modul 3 (Date)</b>		
15 week	<b>Practice</b>	<b>Arbovirus infections. Fevers, encephalitis. Hemorrhagic fevers. Clinic, diagnostics, treatment. Avian flu, clinic, diagnosis, treatment.</b>
	<b>Lecture</b>	<b>Meningococcal infection.</b>

16 week	<b>Practice</b>	<b>Meningococcal infection. Intensive therapy for tropical diseases</b>
	<b>Lecture</b>	<b>HIV.</b>
17 week	<b>Practice</b>	<b>HIV</b>
18 week	<b>Practice</b>	<b>Final lesson</b>