Brief description of the discipline (abstract)

for the catalog of selective subjects

«Clinical parasitology and tropical medicine»

Specialty - medicine

Educational level - master's degree

Term of study (course) - 6th year

Form of study - full-time

Department - Department of internal medicine and infectious diseases

Summary of the subject: The purpose of the course involves students' knowledge of the basics of tropical medicine in general, the etiology, the epidemic process of infectious tropical diseases, the factors that affect its development; clinical and pathogenetic aspects of various (typical, atypical) clinical forms of the most relevant tropical nosologies; methods of early diagnosis and effective treatment, taking into account the stage, severity, clinical form, the presence of complications as well; an important component of the purpose of the study is also a preventive component, which involves obtaining and using specific and non-specific prevention of tropical infectious diseases in travelers and indigenous peoples.

One of the most important **tasks** is a deep understanding of etiological, epidemiological, clinical and pathogenetic features of tropical infectious diseases, the principles of early and rapid diagnosis, differentiation from other nosologies, and competent appointment of etiopathogenetic treatment and prevention in society. Therefore, theoretical knowledge, as well as the acquisition of practical skills for the timely detection of such patients with tropical dangerous diseases is appropriate for the implementation of effective preventive and anti-epidemic measures. Student must know the classification of tropical diseases and parasites, the peculiarities of their spread on the continents; analyze the syndromes and symptoms; formulate a preliminary diagnosis, considering the epidemiological history; prescribe the

necessary additional laboratory and instrumental studies, treat with the most effective drugs considering resistance of activators; to implement preventive and anti-epidemic measures in the focus of a tropical illness.

In **practical classes** on tropical infectious diseases, students study the algorithms of clinical and laboratory diagnosis of the most common parasitic and tropical infectious diseases and is acquainted with the organization of the department of especially dangerous infections, cholera hospital based on the infectious disease department of the Regional Clinical Hospital.

Approximate list of topics:

Thematic plan of practical classes (20 hours):

Topic 1. General features of the pathology of the tropics; prevalence and significance of infectious and parasitic diseases of the tropics. Malaria problems. Differential diagnosis. Treatment of malaria caused by resistant strains of pathogens. Modern prevention.

Topic 2. Features of diarrhea of travelers. Protozoan intestinal invasions: amebiasis, balantidiasis, giardiasis. HIV / AIDS-indicator parasitic infestations and infections (hookworm disease, toxoplasmosis, strongyloidiasis, cryptosporidiosis).

Topic 3. Tropical helminthiasis. Schistosomiasis. General characteristics of filariasis. Onchocerciasis, Calabar swellings, Wuchereria bancrofti infection, brugiosis. Principles of diagnosis, treatment and prevention of filariasis. Dracunculiasis.

Topic 4. Leishmaniasis. Trypanosomiasis. Arbovirus systemic fevers. Yellow fever. Chikungunya. Peculiarities of rickettsiosis: Rocky Mountain spotted fever, Scrub (mite-borne) typhus, endemic typhus, tick-borne typhus of North Asia. Q Fever. Bartonellosis. Ehrlichiosis.

Topic 5. Final Module Control

The list of competencies, the acquisition of which will provide the discipline «Clinical parasitology and tropical medicine»

- **integral:** ability to solve typical and complex specialized tasks and practical problems in professional activities in the field of health care, or in the

learning process, which involves research and / or innovation and is characterized by complexity and uncertainty of conditions and requirements;

- general:
- 1. Ability to abstract thinking, analysis and synthesis.
- 2. The ability to learn and operate modern knowledge.
- 3. Ability to apply knowledge in practical situations.
- 4. Knowledge and understanding of the subject area and understanding of the professional activity.
- 5. Ability to adapt and act in a new situation.
- 6. Ability to make aware decisions.
- 7. Ability to work in a team.
- 8. Interpersonal skills.
- 9. Ability to communicate in the state language both orally and in writing.
- 10. Ability to communicate in a foreign language.
- 11.Skills in the use of information and communication technologies.
- 12. Definiteness and perseverance on tasks and responsibilities taken.
- 13. The ability to act socially responsibly and consciously.
- 14. Ability to act based on ethical considerations (motives).

Special (professional, presentive): the use of theoretical knowledge and practical skills from infectious diseases in the provision of medical care to the population

- 1. To interprete a term «tropical medicine», «infections of tropics», «diseases of travelers», «traveler's diarrhoea», «parasitic invasions». To define a place of subtropical, tropical infectious diseases in the system of infectious diseases and tropical medicine.
- 2. To interprete epidemiological and pathogenetic patterns, peculiarities of clinical course, diagnostics and prophylaxis of parasitoses and tropical infectious diseases.
- 3. To demonstrate skills of clinical and laboratory diagnostics of the most distributed parasitic infections and tropical infectious diseases and their complications.
- 4. To diagnose urgent conditions of the most distributed parasitic infections and tropical infectious diseases.
- 5. To prescribe rational treatment to patients with the most distributed parasitoses and tropical infectious diseases on the different levels of medical care.
- 6. To define tactics of hospitalization and isolation sick with the most distributed parasitoses and tropical infectious diseases.

- 7. To define medical tactics in case of complications or urgent conditions in parasitoses and tropical infectious diseases.
- 8. To plan main prophylactic measures in case of parasitoses and tropical infectious diseases.
- 9. To prognose effects of parasitoses and tropical infectious diseases onto human health.

The list of scientific and pedagogical workers who will provide carrying out of discipline «Clinical parasitology and tropical medicine»:

- 1. Sydorchuk A.S. associate professor, doctor of philosophy.
- 2. Sorokhan V.D. associate professor, candidate of medical sciences.
- 3. Pudiak K.I. assistant professor, doctor of philosophy.

Chief of department Internal medicine and infectious diseases, Doctor of sciences, professor

O.I. Fediv