ODESA NATIONAL MEDICAL UNIVERSITY Medical Faculty Department of Infectious Diseases

Clinical Parasitology and Tropical Medicine		
Course Scope	Total: 3 ECTS credits; 90 hours	
	XI – XII semesters	
	6th year of study	
Days, time, location	According the schedule by cycles,	
	Department of Infectious Diseases,	
	Knyazheskaya str, 1, Odesa	
Instructor(s)	Tetiana V. Chaban, Head of the Department, MD	
	professor	
	Associate professors: candidate in MS Usychenko K.M.,	
	Pavlenko O.V., Gerasymenko O.A.	
	Assistants: Verba N.V., Bocharov V.M., Tiupa V.V.	
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	Department +380931109458,	
	<i>E-mail</i> : nataliia.verba@onmedu.edu.ua or	
	verbanatali1@gmail.com	
	Personal consultations: from 2:00 p.m. to 5:00 p.m. every	
	Thursday, from 9:00 a.m. to 2:00 p.m. every Saturday	
	Online consultations: from 2:00 p.m. to 5:00 p.m. every	
	Thursday, from 9:00 a.m. to 2:00 p.m. every Saturday.	
	The link to the online consultation is provided to each	
	group during classes separately	

Syllabus of the Elective Course (EC 6.23) Clinical Parasitology and Tropical Medicine

COMMUNICATION

Communication with students is provided at classrooms (face-to-face).

During distance learning, communication is carried out through the Microsoft Teams platform, as well as through e-mail correspondence, Viber messengers (within Viber groups created for each one, separately through the head of a group).

The calendar and thematic plans of practical classes are posted in the materials of the department in the blog of the ONMedU library at the link https://info.odmu.edu.ua/chair/infectious_diseases/

Written tasks will be sent via Viber (phone number 0931109458).

Written papers should be sent to nataliia.verba@onmedu.edu.ua or verbanatali1@gmail.com

Face-to-face meetings are not held during quarantine. Make-ups are held online in Teams by the address: "Infectious diseases. Working out class passes."

COURSE ANNOTATION

The course subject is Clinical Parasitology and Tropical Medicine.

Prerequisites

The basis for mastering the course is the knowledge, skills and abilities acquired during the study of such courses as: medical and biological physics, microbiology, virology and immunology, physiology, pathophysiology, clinical pharmacology, internal medicine, surgery.

Postrequisites

Knowledge, skills and abilities acquired during the study of the course "Clinical Parasitology and Tropical Medicine" are necessary for further studies in internal diseases, surgery, neurology, dermatology, epidemiology, ophthalmology, otolaryngology, endocrinology, resuscitation.

Course purpose

In the general system of training a doctor, the elective course "Clinical Parasitology and Tropical Medicine" occupies an important place considering the revival of the Ukrainian population's migration to countries with a tropical climate as a part of the international tourism spread, the international redistribution of the workforce, the need for the development of clinical thinking, abilities and practical skills in future doctors, which ensure the timely diagnosis of parasitic and tropical infectious diseases and their complications, the prescription of rational treatment, choosing the optimal tactics in providing the emergency care. Special attention in the course study is paid to the issues of early diagnostics, pre-hospital patients' treatment, which contributes to the doctor's training improvement particularly in the outpatient services of public health care.

Course objectives:

- to identify the key syndromes in parasitic, tropical and the most common infectious diseases;

- to carry out a differential diagnostics and establish a preliminary clinical diagnosis of the most common infectious diseases;

- to determine various clinical cases and complications;

- to plan the examination of a patient and interpret its results in parasitic and tropical infectious diseases;

- to establish the therapeutic tactics in managing a patient with parasitic and tropical infectious diseases;

- to establish a diagnosis and provide emergency care in major urgent cases of parasitic and tropical infectious diseases;

demonstrate the ability of infectious patients' medical records keeping.

Expected outcomes:

On completing the course a student must

know: etiology, epidemiology, pathogenesis, clinic, diagnostics, differential diagnosis, treatment, prevention of common parasitic and tropical infectious diseases.

be able to:

 communicate with the patient, collect complaints, life and disease history, epidemiological history, conduct a survey of organs and systems;

- conducting a physical examination of the patient and determining the main symptoms of a disease;
- analyze the results of laboratory, functional and instrumental studies;
- carry out differential diagnostics and substantiate a clinical diagnosis;
- determine tactics and provide emergency medical aid in urgent cases;
- determine features and principles of treatment on the basis of a preliminary clinical diagnosis;
- determine primary and secondary prevention measures;
- report on the patient's examination results, prove the correctness of the diagnosis and a differential one, the scope of the prescribed examination, treatment tactics, the assessment of prognosis and work capacity.

COURSE SCOPE

Forms of study

The course provides practicals (30 h.) and assumes trainees' self-study activities (60 h.).

Teaching techniques:

Practicals: multimedia presentations slides; videofilms; demonstration of thematic patients; solving clinical cases, practicing the skills of providing medical care to patients from the moment of their hospitalization, examination, diagnosis, treatment until discharge from the hospital; practicing the skills of working in a team of applicants, doctors, other participants in the provision of medical care.

Self-study work: independent work with recommended basic and additional literature, with electronic information resources, preparation for practical classes; independent work with a bank of test tasks KPOK-2, independent mastering of algorithms for communication with the patient.

Course Content

Topic 1. The infectious diseases' course features in countries with a tropical climate. "Traveler's disease", principles of its treatment and prevention.

Topic 2. Amoebiasis.

Topic 3. Leishmaniases. Cutaneous leishmaniasis.

Topic 4. Leishmaniases. Visceral leishmaniasis.

Topic 5. The malaria course features in countries with a tropical climate. Clinical picture of malaria. Mixed infections. Complicated forms of malaria.

Topic 6. The malaria course features in countries with a tropical climate. Treatment of malaria caused by resistant strains of pathogens. Modern prevention.

Topic 7. Leprosy.

Topic 8. Trypanosomiasis.

Topic 9. Balantidiasis.

Topic 10. Treponematoses: bejel, pinta, and yaws.

Topic 11. Worm infestations of tropical and subtropical regions: Hookworm infections, Clonorchiasis, Fasciolosis, Paragonimiasis. Strongyloidiasis as an HIV-associated helminthiasis. Dracunculiasis.

Topic 12. General characteristics of Filariasis. Onchocerciasis, Calabar swellings, Filariasis due to Wuchereria bancrofti, Brugiosis.

Topic 13. Principles of filariases' diagnostics, treatment and prevention.

Topic 14. Dirofilariases. Myases.

Topic 15. Cestode infections. Rat hymenolepiasis. Echinococcosis. Alveococcosis. Sparganosis.

Topic 16. Schistosomiases (urinary and intestinal).

Topic 17. Arbovirus infections. Arthropod-borne virus encephalitis: LaCrosse, St Louis, western equine, eastern equine, Venezuelan equine, and Powassan.

Topic 18. Arbovirus infections. Arboviral systemic fevers: Dengue, Chikungunya, Yellow fever, Phlebotomus (Pappataci) fever, Rift Valley fever, Zika fever.

Topic 19. Particularly dangerous haemorrhagic fevers: Lassa (LHF), Ebola, and Marburg (MVD).

Topic 20. Poliomyelitis.

Topic 21. Hepatitis E.

Topic 22. Smallpox and Monkeypox.

Topic 23. Coronavirus infection (SARS, MERS, COVID-19).

Topic 24. Features of the rickettsioses' course: epidemic typhus, endemic typhus, Mediterranean spotted fever (MSF), Rocky Mountain spotted fever (RMSF), Orientia tsutsugamushi, North Asian tick typhus.

Recommended literature

Basic:

- Infectious Diseases: textbook (IV a. l.) / O.A. Holubovska, M.A. Andreichyn, A.V. Shkurba, T.V. Chaban et al. K. BCB «Медицина», 2018. (APPROVED by the Ministry of Education and Science of Ukraine as a textbook for students of higher medical educational establishments; APPROVED by the Ministry of Health of Ukraine as a textbook for students of higher medical educational establishments) – 664 с. + 12 с. кольор. вкл. ; двокольор. вид. ISBN 978-617-505-727-8.
- 2. Інфекційні хвороби: Підручник / Є.В. Нікітін, М.А. Андрейчин, К.Л. Сервецький, В.О. Качор, А.М. Головченко, Є.М. Усиченко: За ред. Є.В. Нікітіна та М.А. Андрейчина. Тернопіль: Укрмедкнига, 2004. 364 с. ISBN 966-673-012-Х
- 3. Pediatric Infectious Diseases: textbook / S.O. Kramarov, O.B. Nadraga, L.V. Pypa et al.; edited by S.O. Kramarov, O.B. Nadraga. 4th edition. Kyiv: AUS Medicine Publishing, 2020. 240 p.
- 4. General epidemiology: study guide (IV a. l.) / N.O. Vynograd. 3rd edition, corrected K: BCB «Медицина», 2017. 128 с.
- 5. Hagberg H., Wennerholm U.B., Savman K. // Current Opinion in Infection Diseaie». 2015. Vol. № 3. P. 301-306.

- Harrison's Principles of internal medicine. 19th edition /edited by Anthony S. Fauci, Dennis L Kasper, Dan L. Longo [et all]. – New York. - 2017. – 1307 p. Additional
- 1. Comprehensive Textbook of Infectious Disease: M. I. Sahadulla, S. A. Udman. 2rd edition. Jaypee Brothers, Medical Publishers Pvt. Limited, 2019 835 p.
- Атлас дитячих інфекційних хвороб. Червона Книга = Red Book® Atlas of Pediatric Infectious Diseases: пер. 3-го англ. вид. : двомов. вид. / Керол Дж. Бейкер ; наук. ред. пер. проф. С.О. Крамарьов; пер. з англ. Л.В. Закордонець. — К. : ВСВ «Медицина», 2019. — 744 с. Tropical infections: manual/ed. MA Andreychyn, VD Moskaliuk. - Lviv: "Magnolia 2006", 2019. - 220 p.
- 3. Tropical infections: manual/ed. MA Andreychyn, VD Moskaliuk. Lviv: "Magnolia 2006", 2019. 220 p.

Online resources

- <u>https://library.odmu.edu.ua/catalog/</u> Electronic catalogue of the ONMedU library
- <u>http://moz.gov.ua</u> Ministry of Health of Ukraine
- www.ama-assn.org American Medical Association
- www.who.int World Health Organisation
- www.dec.gov.ua/mtd/home/ The State Expert Center of the Ministry of Health of Ukraine
- http://bma.org.uk British Medical Association
- www.gmc-uk.org General Medical Council (GMC)
- www.bundesaerztekammer.de German Medical Association

ASSESSMENT

Types of control: current monitoring and final control. Form of final control is a credit.

Current monitoring of students' performance is carried out at practicals based on theoretical knowledge and practical skills and abilities, for which the following forms are used:

- oral inquiry;

- flash-poll;

- control of practical skills (work at the patient's bedside) - by a teacher, self-assessment;

- *control of a situational clinical problem solving* with a diagnosis, its justification and the answer to a question at the end of a session (written control);

- *oral/written answers* to questions on SSS topics in accordance with the calendar and topic plan;

- assessment of class activity

The grade for one practical session is the arithmetic average of all components and can only have a whole value (5, 4, 3, 2), which is rounded according to the statistical method.

Grade	Evaluation criteria		
Excellent «5»	The acquirer has a fluent command of the material, takes an active		
	part in discussing and solving a situational clinical problem,		
	confidently demonstrates practical skills during the examination of a		
	patient and the interpretation of clinical, laboratory and instrumental		
	research data, expresses his opinion on the topic of the lesson,		
	demonstrates clinical thinking.		
Good «4»	The acquirer has a good command of the material, participates in the		
	discussion and solution of a situational clinical problem,		
	demonstrates practical skills during the examination of a patient and		
	the interpretation of clinical, laboratory and instrumental research		
	data with some errors, expresses his opinion on the subject of the		
	lesson, demonstrates clinical thinking.		
Satisfactory	The acquirer does not have sufficient knowledge of the material, is		
«3»	unsure of participating in the discussion and solving of the		
	situational clinical problem, demonstrates practical skills during the		
	examination of the patient and the interpretation of clinical,		
	laboratory and instrumental research data with significant errors.		

Current evaluation criteria in practical training

Unsatisfactory	The acquirer does not possess the material, does not participate in		
«2»	the discussion and solution of the situational clinical problem, does		
	not demonstrate practical skills during the examination of the patient		
	and the interpretation of clinical, laboratory and instrumental		
	research data.		

Credit is awarded to an applicant who has completed all the tasks of the work program of the discipline, actively participated in practical classes, completed and defended an individual assignment and has a current average grade of at least 3.0 and has no academic debt.

The test is taken: at the last lesson. The grade for the test is the arithmetic average of all components on a traditional four-point scale and has a value that is rounded according to the statistical method with two decimal places.

Distribution of points received by acquirers of higher education

The obtained grade point average for the discipline for students who have successfully completed the work program of the discipline is converted from the traditional four-point scale to points on a 200-point scale, as shown in the table:

Table of conversion of traditional grade into a mutit-point scale		
National assessment	The sum of points	
for discipline	for the discipline	
Excellent («5»)	185-200	
Good («4»)	151-184	
Satisfactory («3»)	120-150	
Unsatisfactory («2»)	Lower then 120	

Table of conversion of traditional grade into a multi-point scale

A multi-point scale (200-point scale) characterizes the actual performance of each student in mastering the educational component. The conversion of the traditional grade (grade point average for a discipline) into a 200-point scale is performed by the University's Information Technology Department.

According to the points obtained on a 200-point scale, the achievements of applicants are evaluated according to the ECTS rating scale. Further ranking according to the ECTS rating scale allows to evaluate the achievements of applicants in the educational component who study in one course of one specialty, according to the points they received.

The ECTS scale is a relative and comparative rating scale that establishes the applicant's belonging to the group of the best or worst among the reference group of

fellow students (faculty, specialty). Grade A on the ECTS scale cannot be equal to grade A, and grade B cannot be equal to grade B, etc. When converting from a multipoint scale, the limits of grades "A", "B", "C", "D", "E" on the ECTS scale do not coincide with the limits of grades "5", "4", "3" on the traditional scale. Applicants who have received grades "FX" and "F" ("2") are not included in the list of ranked applicants. The grade "FX" is assigned to applicants who have scored the minimum number of points for current academic activities, but who have not been credited with the final control. The grade "F" is assigned to applicants who have attended all classes in the discipline, but have not gained an average score (3.00) for current academic activities and are not allowed to take the final control.

Acquirers enrolled in the same course (one specialty), based on the number of points gained in the discipline, are ranked on the ECTS scale as follows:

Conversion of the traditional grade from the discipline and the sum of points on the ECTS scale

ECTS mark	Statistic index
"A"	Next 10% of acquirers
"B"	Next 25% of acquirers
"C"	Next 30% of acquirers
"D"	Next 25% of acquirers
"E"	Next 10% of acquirers

STUDENTS' SELF-STUDY WORK

Students' self-study which is performed on the topic of a practical class along with classroom activities, is evaluated during the current monitoring at the corresponding session.

Self-study work involves preparation to each thematic session.

COURSE POLICIES

Deadlines and make-ups policy.

Unexcused absences at practical sessions are made up according to the schedule to the instructor on duty.

Absences for valid reasons are worked out according to an individual schedule with the permission of the dean's office. Work-up of missed classes according to an individual schedule is carried out in full at a time specially determined by the head/head instructor of the department every day, but no more than one class per day at the department.

Academic integrity policy:

Students must observe academic integrity, namely:

- independent performance of all types of work, assignments, forms of control provided by this course work program;
- cite all sources of information in the case of using ideas, designs, statements, data;
- observance of legislation on copyright and related rights;
- providing reliable information about the results of one's own educational (scientific) activity, used research methods and sources of information.

Unacceptable for participants of the educational process are:

- using family or official ties to obtain a positive or higher grade during any form of control of learning outcomes or advantages in academic performance;
- use of prohibited auxiliary materials or technical means (cheat sheets, notes, micro-earphones, telephones, smartphones, tablets, etc.) at controls;
- passing procedures for learning outcomes control by fake persons.

For violation of academic integrity, students may get the following academic penalties:

- decrease in grades for the control work, current performance, credit, etc.;
- retake of assessment (control work, credit, etc.);
- additional control assignments (additional individual tasks, control works, tests, etc.);
- conducting an additional inspection of other works authored by a violator.

Attendance policy

Uniform: a medical gown that completely covers the outer clothing, or medical pajamas, a cap, a mask, and a change of shoes.

Equipment: notebook, pen, phonendoscope.

State of health: students suffering from acute infectious diseases, including respiratory diseases, are not allowed to attend classes.

A student who is late for class can attend it, but if an instructor noted his absence in the register, he must make it up in the general order.

In order to receive a satisfactory grade, it is mandatory to attend and participate at classroom sessions.

Mobile devices

It is allowed to be used with the instructor's permission for performing a task.

Student Conduct

Students and instructors' conduct in a classrooms must be working and calm, strictly comply with the rules established by the Regulations on academic integrity and ethics in academic relations at Odesa National Medical University, in accordance with the Code of Academic Ethics and University Community Relations of Odesa National Medical University, Regulations on Prevention and detection of academic plagiarism in the research and educational work of students of higher education, scientists and teachers of Odesa National Medical University.