



COURSE (MODULE) DESCRIPTION

Course (Module) Title	Code
Infectious Diseases and Dermatovenereology II	

Instructor(s)	Department(s)
Coordinator: Prof. dr. L. Jančorienė Others: Other lecturers from the Clinic of Infectious Diseases and Dermatovenereology at the Institute of Clinical Medicine who contribute to the implementation of the course (module)	Vilnius University, Faculty of Medicine, Institute of Clinical Medicine, Department of Infectious Diseases and Dermatovenereology, Santariškių St. 14, 08406 Vilnius, Lithuania

Level of study	Course (module) type
Integrated studies	Compulsory

Delivery format	Duration	Language(s) of instruction
Lectures and seminars in classrooms, practical sessions in the wards of the infectious diseases and dermatovenereology departments, consultation rooms, the operating room, and the emergency department.	6th semester (spring semester)	English

Requirements for students	
Prerequisites: The student must have completed the following courses: human anatomy, human physiology, microbiology, pharmacology, pathological anatomy, and introduction to internal medicine	Additional requirements (if any): None

Course (module) credit hours	Total student workload	Contact hours	Hours of independent study
4 credits	108 hours Infectious Diseases	54 hours Infectious Diseases	54 hours Infectious Diseases

Course (module) objective: competencies developed by the study program		
Course objective: To provide students with systematic knowledge of infectious diseases and dermatovenereology and to develop their ability to apply this knowledge in clinical practice, by integrating biomedical and clinical sciences, fostering critical, analytical, and clinical thinking, effective professional communication, and responsibility for patient safety and public health (general competencies). Communication with students will take place via VMA - Vilnius University Virtual Learning Environment (VU VLE) (students will always receive an email when a message is posted). Develop professional competencies that enable students to identify, analyze, and evaluate the etiology, pathogenesis, epidemiology, and clinical presentation of infectious diseases, skin diseases, and sexually transmitted infections; plan and conduct patient examinations; select and interpret laboratory and diagnostic tests; formulate and differentiate a diagnosis; make informed clinical decisions regarding treatment and the application of individual and public-level preventive measures, in accordance with evidence-based medicine and the standards of medical practice.		
Course (module) learning objectives	Study methods	Assessment methods
General competencies		

Upon successful completion of this module, the student will be able to:		
Adhere to the principles of professional ethics, act with integrity, empathy, and responsibility toward patients and society. Critically and analytically evaluate clinical information and reflect self-critically on their own actions and decisions. Communicate effectively with patients, their families, and members of the healthcare team. Work as part of a team, recognize the limits of one's own competencies, and seek help when necessary. Be able to learn independently and make decisions based on the principles of evidence-based medicine. Act with integrity and adhere to ethical obligations; be empathetic; be able to think critically and self-critically; be creative; be proactive and goal-oriented; be able to communicate with others.	Study methods are selected to ensure the integration of practical and theoretical competencies: -practical training in infectious disease wards, emergency and urgent care units, resuscitation and intensive care units, clinical diagnostic laboratories, dermatovenerology wards, outpatient clinics, and consultation departments -analysis of clinical cases during seminars -lectures focused on building systematic knowledge -case-based learning -group work and discussions -self-study work (literature review, solving clinical scenarios).	Assessment is focused on continuous evaluation of competencies and a final knowledge assessment: -Continuous (formative) assessment: evaluation of clinical work during practical sessions (patient examination, decision-making, communication), evaluation of clinical case analyses in seminars, evaluation of independent assignments -Summative assessment: final exam (written), assessing theoretical knowledge, clinical reasoning, and decision-making.
Subject-specific competencies Upon successful completion of this module, the student will be able to:		
Examine a patient with an infectious disease, skin disease, or sexually transmitted infection: take a medical, epidemiological, and lifestyle history; perform a physical examination; assess the severity of the condition; establish a preliminary diagnosis, differentiate it, and justify it; develop a plan for testing and treatment; Inform the patient about the assessment of their condition, the diagnosis, and preventive measures; provide support to the patient and earn their trust.	Practical training in the wards of the infectious diseases department, the emergency and urgent care, resuscitation, and intensive care units, as well as in the dermatovenerology department wards, the outpatient clinic, and consultation rooms. Analysis of clinical cases and situations during seminars.	Continuous work during practical training in the infectious diseases, emergency and urgent care, resuscitation and intensive care, and dermatovenerology department wards. Assessment of the analysis of clinical cases and situations during seminars and practical sessions. At the end of the course – a written exam
Collect samples for microbiological testing; understand the characteristics, advantages, and disadvantages of testing methods in diagnosing specific diseases; be able to interpret test results; assess the resistance of microorganisms to antimicrobial drugs. Master the examination of the skin, its appendages, and adjacent mucous membranes; assess the morphology of visible lesions, perform functional tests and skin allergy tests, and interpret their results; become familiar with targeted laboratory and invasive diagnostic and treatment methods for skin and mucosal pathologies.	Practical training in the departments of infectious diseases, admissions and emergency care, resuscitation and intensive care, the clinical diagnostics laboratory, the dermatovenerology department, the outpatient clinic, and the consultation rooms. Analysis of clinical cases during seminars.	Continuous assessment during practical training. Assessment of clinical case analyses during seminars and practical sessions. A written exam at the end of the course.
Assess indications for hospitalization and intensive care; prescribe appropriate treatment (etiological, pathogenetic, and symptomatic); apply primary and secondary preventive measures	Practical training in the wards of the infectious diseases department, the emergency and urgent care, resuscitation, and intensive care units, the dermatovenerology department wards, the day hospital, and consultation rooms. Analysis of clinical cases during seminars.	Continuous assessment during practical training in the infectious diseases, emergency and urgent care, resuscitation and intensive care, and dermatovenerology departments. Assessment of the analysis of clinical cases and situations during seminars and practical sessions. A written exam at the end of the course.

Define modern epidemiology and its significance for medicine and public health; calculate and interpret indicators of frequency, association, and potential impact; describe the main types of epidemiological studies and their areas of application; understand the principles of epidemiological surveillance and the management of infectious diseases, skin diseases, and sexually transmitted infections	Lectures, seminars, group work, and discussions	Participation in seminars, completion of practical exercises, evaluation of independent work
Understand the principles of effective communication in medical practice; be able to communicate with patients and their relatives	Practical training in the departments of infectious diseases, emergency and urgent care, resuscitation and intensive care, and dermatovenerology, as well as in the outpatient clinic and consultation rooms.	Continuous assessment during practical training.
Properly manage and store medical records; be able to use information technology and conduct information searches; store and update data.	Seminars, practical training in hospital departments, independent work.	Continuous assessment during practical exercises and case analysis in seminars.

Topics	Contact hours							Time for independent self-study and assignments	
	Lectures	Consultations	Seminars	Practical exercises	Lab work	Internship	All contact work	Self-study work	Assignments
1. Infectious causes of jaundice: jaundice with fever, leptospirosis, and acute and chronic viral hepatitis (A, E, B, C, D).	2		3	2			7	7	Prepare for exercises on the characteristics of infectious jaundice, be able to distinguish between prehepatic, hepatic, and posthepatic jaundice, and interpret key laboratory indicators. Be familiar with infections characterized by jaundice and fever. Learn the epidemiology, diagnosis, clinical presentation, and treatment of leptospirosis. Focus primarily on acute viral hepatitis A, E, B, C, and D, be able to compare them based on modes of transmission, risk of chronicity, and vaccination options, as well as understand HBV serological diagnostics and know the basic principles of treatment. When studying, focus on clinical reasoning, be able to assess whether jaundice is of infectious origin, what its cause is,

									which tests to order, and when treatment or hospitalization is necessary. Study of professional literature, searching for information online. Preparation for discussion, written exam, test, and analysis of clinical cases.	
2. HIV infection. AIDS and opportunistic infections.	4		4	2				10	10	When preparing for the topic of HIV infection, the most important thing is to understand the course of the disease and the damage to the immune system, how the virus affects CD4 cells and leads to immunodeficiency. You must be able to distinguish the stages of HIV infection, define the AIDS stage, and understand the principles of diagnosis and their interpretation. Understand the principles of ART. Be familiar with opportunistic infections, their relationship to CD4 counts, and the principles of prevention and treatment. When studying, focus on clinical reasoning, when to suspect HIV, which tests to order, how to assess the stage of the disease, and when to initiate prevention or treatment for opportunistic infections. Understand the principles of PrEP and PEP. Preparation for discussion, written examination, test, and analysis of clinical cases.
3. Sepsis. Infectious-toxic shock.	2							2	2	Study of professional literature. When preparing for the topic of sepsis and infectious-toxic shock, it is most important to understand that sepsis is a life-threatening condition arising from a dysregulated host response to infection

									and leading to organ dysfunction. It is necessary to know the main diagnostic criteria (clinical presentation, SOFA/qSOFA), the importance of early diagnosis and treatment, particularly the prompt administration of antibiotics, fluid therapy, and control of the source of infection. It is important to be able to recognize infectious-toxic shock as a severe form of sepsis in which circulatory failure develops. When learning, it is important to focus on clinical reasoning, quickly assessing the severity of the patient's condition, suspecting sepsis, selecting the necessary tests, and initiating treatment immediately, as this determines the prognosis.
4. Intestinal infections (bacterial [salmonellosis, campylobacteriosis, yersiniosis, shigellosis], viral [rotavirus, norovirus infections], protozoal intestinal infections [giardiasis, amebiasis]). Dehydration. <i>C. difficile</i> infection.			3	3			6	6	Study of the relevant literature. When preparing for the topic of intestinal infections, it is most important to understand their etiological diversity, bacterial, viral, and protozoal infections, and to be able to differentiate them based on clinical presentation. Know the basic principles of diagnosis, assessment of the degree of dehydration, and the principles of fluid and electrolyte correction. It is also important to be familiar with <i>C. difficile</i> infection. When studying, focus on practical application, be able to assess the severity of the patient's condition, indications for hospitalization, and select treatment and preventive measures. Be prepared to answer test questions.
5. Parasitic diseases (trichinellosis, echinococcosis, ascariasis, toxoplasmosis).			2	2			4	4	Study of specialized literature. When

									preparing for the topic of intestinal parasitic diseases, learn the main routes of infection and be able to differentiate them based on clinical presentation. Know the basic principles of diagnosis, clinical presentation, treatment, and prevention. Focus on practical application, be able to evaluate a patient's test results and select appropriate treatment and preventive measures. Prepare for the analysis of clinical cases. Prepare to answer test questions.
6. Respiratory tract infections (influenza, parainfluenza, COVID-19, RSV). Legionellosis. Mycoplasma pneumonia.	2						2	2	Prepare for a lecture on viral, bacterial, and atypical infections of the respiratory tract.
7. Infections caused by viruses of the <i>Herpes</i> family (EBV, CMV, <i>Herpes simplex</i> , <i>Herpes zoster</i>). Diphtheria. Streptococcal tonsillitis.			3	3			6	6	When preparing for this topic, it is most important to understand the clinical characteristics of different pathogens and their significance for different patient groups. Be familiar with infections caused by viruses of the <i>Herpes</i> family, their latent course, reactivation, clinical presentation, and diagnosis; recognize infections in immunocompromised patients. Understand the effects of diphtheria toxin, its clinical presentation, emergency treatment with antitoxin, and the diagnosis of streptococcal tonsillitis, indications for treatment, and prevention of complications. Learning should focus on clinical application, when to suspect these infections, which tests to order, how to interpret results, and what treatment or prophylaxis to apply. Prepare for a written

									exam and the analysis of clinical cases.
8. Erysipelas. Cellulitis. Skin infections following bites from animals, arthropods, and insects. Botulism. Tetanus. Rabies.			3	3			6	6	When preparing for this topic, be able to recognize skin and soft tissue infections and assess their severity. Know the differences between erysipelas and cellulitis, their most common causative agents, clinical presentation, and principles of treatment. Understand infections resulting from animal, arthropod, or insect bites: potential causative agents, wound care, and prevention. Know the clinical signs, diagnosis, and treatment of botulism. Be familiar with pre- and post-exposure prophylaxis for tetanus and rabies, as these diseases are rare but highly dangerous. Learning should focus on the practical application of be able to assess the source of infection, prescribe appropriate treatment, and apply preventive measures in a timely manner. Prepare for a written exam.
9. Travel-related diseases: malaria, leishmaniasis, typhoid fever. Hemorrhagic fevers: yellow fever, dengue, chikungunya, Ebola, etc.	2		2	3			7	7	Prepare for exercises on the etiology, epidemiology, pathogenesis, clinical presentation, diagnosis, treatment, and prevention of malaria, leishmaniasis, typhoid fever, and hemorrhagic fevers. Understand the epidemiology, clinical presentation, diagnosis, treatment, and prevention of dengue fever. Prepare for the analysis of clinical cases and written examinations.
10. Neuroinfections: bacterial and viral meningitis, encephalitis.	2						2	2	Prepare for a lecture on the etiology, epidemiology, pathogenesis, clinical features, diagnosis,

									treatment, and prevention of bacterial and viral meningitis and encephalitis; the characteristics of meningococcal and pneumococcal infections and their clinical forms, diagnosis, treatment, and prevention.
11. Fundamentals of Infection Control	2						2	2	Prepare for the lecture on the principles of infection control.
Total	16		20	18			54	54	

Assessment strategy	Weight (%)	Deadline	Assessment criteria
Evaluation during the workshops	30%	During the semester	The student is able to perform the following tasks: - examine a patient with an infectious disease, a skin disease, or a sexually transmitted infection: take a medical history, perform a physical examination, establish and correctly formulate a diagnosis, differentiate it from other diseases, and develop a plan for testing and treatment. - collect samples for microbiological testing, understand the specifics of testing methods, and be able to interpret test results; be able to assess the resistance of microorganisms to antimicrobial drugs; master the examination of the skin, skin appendages, and adjacent mucous membranes, the morphology of visible lesions, functional tests, and skin allergy tests, and to evaluate their results; become familiar with targeted laboratory and invasive diagnostic and treatment methods for pathologies of the skin, skin appendages, and adjacent mucous membranes. - assess the indications for hospitalization and intensive care. - prescribe appropriate treatment and preventive measures. - properly complete medical documentation. A brief oral or written assessment (clinical scenario, test) during each practical workshop at the lecturer discretion. The cumulative assessment for work during the practical sessions' accounts for 30% of the final grade.
Exam (administered after Part II of the module)	70%	During the semester	The exam consists of 100 multiple-choice questions covering theoretical and practical knowledge, clinical scenarios from infectious diseases (65 questions) and dermatovenereology (35 questions). The exam duration is 2 hours. The questions may have either one or multiple correct answers. A partially correct answer is scored proportionally based on the correct portion. The total number of points earned is evaluated on a 100-point scale, which is automatically converted to a 10-point scale. The final grade is calculated as follows: $\text{work during exercises} \times 0.3 + \text{exam grade} \times 0.7$ The rounding rule applies only to the final grade: If the grade reaches the X.2 threshold, it is rounded up (e.g., 8.20 becomes 9). A grade lower than X.2 is rounded down. If the score reaches > 9.0, it is rounded up to 10. If the score is exactly 9.0, the final score remains 9.

Author	Year of Publication	Title	Periodical No. or volume	Place of publication and publisher or web link
Required reading				
Mickienė, Auksė; Kuliešė, Monika; Pakalnienė, Jolita; Pukenytė, Evelina; Vážnaisienė, Danguolė; Vėlyvytė, Daiva; Jančorienė, Ligita; Matulionytė, Raimonda; Miciulevičienė, Jolanta.	2024	Infekcinės ligos: A University Textbook / Compiled and edited by Auksė Mickienė in Lithuanian		Lithuanian University of Health Sciences Academic Publishing, Kaunas, 2024. 526 p.
Hoffmann C, Rockstroh J.	2024	HIV 2023/2024 www.hivbook.com		Medizin Fokus Verlag
Editors: M. J. Blaser, J. I. Cohen, S. M. Holland	2025 ^{10th} ed	Mandell, Douglas, and Bennett's Principles and Practice of Infectious Diseases	Vol. 1 Vol. 2	Elsevier, Saunders
European textbook / Editors Pierre Van Damme, Paolo Bonanni, Jade Pattyn.	2025	eBook: Vaccines and Vaccinations for Adults		Springer Nature, 2025
Valiukevičienė S, Grigaitienė J, Burg G, Itin P, McGrath J.	2021	DOIT: Dermatology Online with Interactive Technology. Webbook		LSMU, VU www.cyberderm.net
Additional References				
Centers for Disease Control and Prevention (CDC)	2024	Health Information for International Travel 2024 (CDC Yellow Book)		Oxford University Press, 2024 Hhttp://wwwnc.cdc.gov/travel/yellowbook/2024
Zuckerman J.	2010 ^{2nd} ed	Travelers' Vaccines		BC Decker Inc
Plotkin S, Offit P, Orenstein W, Edwards KM.	2023, ^{8th} ed	Vaccines		Elsevier
Bologna JL, Jorizzo JL, Rapini RP	2024 ^{5th} ed	Dermatology		London, Elsevier
Wolff K, Johnsons R.	2023 ^{9th} ed	Fitzpatrick's Color Atlas and Synopsis of Clinical Dermatology		London, McGraw Hill
Wolff K, Goldsmith LA, et al.	2024 ^{11th} ed	Fitzpatrick's Dermatology		London McGraw-Hill London McGraw-Hill
Waltham, MA: UpToDate Inc.	2026	UpToDate		https://www.uptodate.com
Gilbert DN, Chambers HF, Saag MS, et al.	2024	Sanford Guide to Antimicrobial Therapy [Internet]		https://www.sanfordguide.com