COURSE UNIT DESCRIPTION

Course unit title	Code
Propaedeutics of Internal Diseases and the Basics of Clinical Oncology (II) 2023-	
2024	

nius University culty of Medicine
culty of Medicine
partment of Internal Diseases, Family dicine and Oncology
oar

Cycle	Level of the course unit	Type of the course unit
Integrated University Studies	-	Compulsory
(stages I and II)		

Mode of delivery	Period of delivery	Language of instruction
Auditorium.	II course, spring semester, 4th	Lithuanian, English
Lectures and seminars in auditorium.		
Practice in training rooms and in		
Therapeutics divisions of hospitals		
(clinical examination of patients in		
wards)		

Prerequisites and corequisites								
Prerequisites. A student must have completed the following courses:	Corequisites (if any): -							
Human Anatomy, Human Histology, Human Biology and Genetics,								
Biochemistry, Psychology, Basics of Professional Communication and								
Psychosomatics.								

Number of ECTS credits	Total student's workload	Contact hours	Self-study hours
allocated to the course			
unit			
5	133	67	66

Purpose of the course unit Programme competences to be developed

The purpose is to develop student autonomy during the clinical examination of a patient as well as analytical and critical thinking through evaluation of clinical examination data, laboratory and instrumental investigations; to develop professional competence of a medical doctor in establishing the clinical diagnosis of internal disease syndromes and oncological diseases, and to predict further investigation plan and treatment.

Learning outcomes of the course unit	Teaching and learning methods	Assessment methods
Generic competences		
At the end of the study programme a		
graduate will be able:		
1. Professional qualities	Methods of active practical	Continuous assessment of
1.1. Be able to act in compliance with ethical	teaching/learning: during the practice	practical skills and
standards, apply good medical practice	in hospital divisions while	theoretical knowledge
principles at work, to be emphatic, honest, to	communicating with patients, hospital	through the communication
think critically and self-critically, to be	employees, and lecturers students learn	between a teacher and a

creative, take the initiative, and to effectively communicate with others.

Students at the end this course will be able to adhere to the principles of medical ethics and deontology think critically and self-critically, be creative.

communication and principles of ethics, develop their skills for appropriate communication with patients and colleagues. Preparation of presentations, posters, discussions. Research methods: independent search for information, studying professional

literature and course materials.

student while performing clinical examination of patients in hospital wards and during colloquiums.

Subject-specific competences

At the end of the study programme a graduate will be able:

6. Assessment of clinical signs, making an appointment for the laboratory tests and investigations, differential diagnostics and development of a monitoring plan.

6.1. Recognize, assess and describe the manifestation of the diseases and their progress, severity of symptoms and signs; formulate the required tests and interpret their results.

Students at the end of this course will be able to perform patient's systemic and complete clinical examination: structured history taking, practically apply methods of physical examination: inspection, palpation, percussion, auscultation, anthropometry, thermometry; demonstrate expert understanding of the assessment data interpretation; diagnose the main syndromes of internal diseases and pathological conditions; develop a patient's investigation plan, and write a patient's case history independently.

Basics of cancer classification; principles of cancer patient's clinical and instrumental investigation; peculiarities of complex diagnostics and diagnostic algorithms of different localization tumours; principles of cancer systemic therapy (chemotherapy, immunotherapy, hormonal, target therapy); indications, contraindications, adverse effects and their treatment (standard and high doses), target and immunotherapy; principles of surgical and radiation oncology; basics of bone marrow transplantation and indications for treatment of solid tumours; acute states in oncology and principles of their treatment; paraneoplastic syndromes; palliative cancer care and treatment of oncologic pain. Students at the end of this course will be able to define cancer stage according to TNM classification; interpret the results of clinical examination and laboratory tests performed to the patients with cancer; evaluate various clinical situations and provide solutions; to plan multidisciplinary treatment principles for these particular patients.

Lectures, seminars, practical training, internship.

Methods of active practical teaching/learning: students learn to of perform clinical examination patients practically, analyse, assess and summarize the data of clinical laboratory and instrumental examinations during the practical training in simulation classes, later on in hospital wards. Group discussions; interactive medical cases. Solutions of theoretical clinical situations (long and short clinical cases).

Research methods: analysis of video tutorials of physical examination of patients; audio tutorials (cardiac, lung auscultation); Individual study of course materials, studying professional literature, information search and assessment. Preparation of presentations, posters, e learning.

Continuous assessment of practical skills and theoretical knowledge through the communication between a teacher and a student while performing clinical examination of patients in wards and during colloquiums.

10. Competent communication in medical practice.

10.1. Communicate clearly, sensitively and effectively with patients, colleagues, patient relatives, and the disabled.

While effectively communicating with a patient, students will be able to gather information about his/her state of health.

Methods of active practical teaching/learning: students learn to communicate with patients during the practical training in simulation classes, later, in hospital wards. Group discussion. Interactive medical cases, role-plays.

Research methods: educational training tests, analysis of clinical cases, individual study of course materials and professional literature.

Continuous assessment of practical skills and theoretical knowledge through the communication between a teacher and a student while performing clinical examination of patients in wards and during colloquiums.

11. Application of ethical and legal principles in medical practice:

11.1 Maintain confidentiality, apply ethical principles in clinical practice; fill in forms of person's informed agreement; apply national and European legislation in clinical practice.

Student at the end of this course will be able to apply ethical principles and observe confidentiality while performing clinical examination of patient.

Methods of active practical teaching/learning: during practical training in simulation classes, later in hospital divisions students learn to apply ethical principles while solving clinical situations.

Research methods: educational training tests, analysis of clinical cases, group discussion, individual study of course materials and professional literature.

Continuous assessment of practical skills and theoretical knowledge through the communication between a teacher and a student while performing clinical examination of patients in wards and during colloquiums.

5		C	ontac	t wor		rs			Time and tasks of self-study		
5	Le	C	Pr	Se	La	Pr	Ţ	Se	Tasks		
4 semester											
Clinical examination of patients presenting with valvular heart diseases. Mitral, Aortic, Tricuspid Regurgitation and Stenosis. General understanding of etiology and changes in hemodynamics. Clinical symptoms and signs, diagnostic criteria.			2	2			4	3	Study of relevant literature. Preparation for practical training about valvular heart diseases. Audio tutorial (training for listening of heart sounds and murmurs).		
Clinical examination of patients with rheumatic fever, infective endocarditis, pericarditis. General understanding of etiology and disease course. Clinical symptoms and signs, diagnostic criteria			1	2			3	3	Study of relevant literature. Preparation for practical training about rheumatic fever, infective myocarditis, pericarditis.		
Clinical examination of the patients with coronary (or ischemic) heart disease, arterial hypertension. General understanding of etiopathology and the disease course. Clinical symptoms and signs of angina pectoris and myocardial infarction. Diagnostic criteria.	2		2	2			6	3	Study of relevant literature. Preparation for practical training about coronary heart disease, angina pectoris and myocardial infarction, arterial hypertension.		
Colloquium I(IV) in writing				1			1	3	Preparation for the colloquium.		
Clinical examination of patients presenting with acute and chronic bronchitis, bronchial asthma, chronic obstructive pulmonary disease. General understanding of etiopathogenesis and the course of the disease. Clinical symptoms and signs. Diagnostic criteria.	1		1	1			3	2	Study of relevant literature. Preparation for practical training about acute and chronic bronchial diseases.		

Clinical examination of patients presenting with pneumonia, pleuritis (dry/fibrinous and exudative). General understanding of etiopathogenesis and the course of disease. Clinical symptoms and signs. Diagnostic criteria.	1	2	1	4	2	Study of relevant literature. Preparation for practical training about pneumonia, pleurisy.
Clinical examination of patients presenting with cystitis, pyelonephritis, kidney stone diseases. General understanding of etiopathogenesis and the course of disease. Clinical symptoms and signs. Diagnostic criteria.		1	1	2	2	Study of relevant literature. Preparation for practical training about cystitis, pyelonephritis, kidney stone diseases.
Clinical examination of patients presenting with acute and chronic glomerulonephritis. General understanding of etiopathogenesis and the course of disease. Clinical symptoms and signs. Diagnostic criteria.	2	1	1	4	3	Study of relevant literature. Preparation for practical training about acute and chronic glomerulinephritis.
Collection of data for patient Case report.		2	1	3	5	Work on Case report.
Colloquium II (V) in writing.			1	1	3	Preparation for the colloquium.
Clinical examination of patients presenting with gastritis, ulcer disease, pancreatitis. General understanding of etiopathogenesis and the course of disease. Clinical symptoms and signs. Diagnostic criteria.		1	1	2	2	Study of relevant literature. Preparation for practical training about gastritis, ulcer disease, pancreatitis.
Clinical examination of patients presenting with cholelithiasis (gallstones), hepatitis, liver cirrhosis. General understanding of etiopathogenesis and the course of disease. Clinical symptoms and signs. Diagnostic criteria.	1	2	1	4	3	Study of relevant literature. Preparation for practical training about cholelithiasis, liver diseases.
Clinical examination of patients presenting with diabetes mellitus, thyrotoxicosis, mixedema. General understanding of etiopathogenesis. Clinical symptoms and signs. Diagnostic criteria.	1	1	1	3	3	Study of relevant literature. Preparation for practical training about diabetes mellitus and the main thyroid diseases.
Colloquium III (VI) in writing. Credit test.			1	1	3	Preparation for the colloquium.
Cancer biology and distribution.	2	2	1	5	4	Preparation for diagnostic methods of cancer and differential diagnostics.
Diagnosis methods, differential diagnostics of cancer, staging according TNM classification	1	2	1	4	3	Preparation for practical training about cancer stages according to classification (TNM system).
Principles of multidisciplinary and systemic cancer treatment (chemotherapy, biological drugs, immunotherapy, etc.), local cancer	1	2		3	2	Preparation for practice about cancer treatment principles.

treatment principles: basics of radiotherapy.							
The most common complications of cancer treatment (febrile neutropenia, etc.)	1	2			3	3	Preparation for practice about complications of cancer treatment.
Autologous hematopoietic stem cell transplantation (Autologous HCT)			2		2	2	Preparation for a seminar about autologous HCT.
Allogeneic hematopoietic stem cell transplantation (Allogeneic HCT)			2		2	2	Preparation for a seminar about Allogeneic HCT.
Oncological emergencies	1		1		2	2	Preparation for a seminar about oncological emergencies
Paraneoplastic syndromes	1		1		2	2	Preparation for a seminar about paraneoplastic syndromes
Principles of palliative therapy in cancer patients, treatment of oncologic pain.	1		1		2	2	Preparation for a seminar about principles of palliative therapy in cancer patients, treatment of oncologic pain.
Ethical issues in oncology			1		1	1	Preparation for a seminar about ethical issues in oncology.
Colloquium I (VII) in writing.						3	Preparation for the colloquium.
Total	16	24	27		67	66	

Assessment strategy	Assessment criteria
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Assessment requirements

Two credit tests and examination.

Course of Propedeutics of Internal Diseases (PID):

- 3 colloquiums;
- Patient clinical examination and writing of a Medical (or Case) history;
- Checking and assessment of practical skills of a student (practical examination during semester).

Course of Fundamentals of Clinical Oncology (FCO):

- 1 colloquium;
- Assessment of student's practical skills.

Propaedeutics of Internal Diseases and the Basics of Clinical Oncology

Students have to pass 7 colloquiums (6 from PID and I from FCO) and to perform analysis of two ECG's during two semesters period of the course.

At the end of PID course in the 4th semester- credit test. Students should have positive evaluations: grade should be higher than 5 or equal to 5 in ten-point scale ("Sufficient" or Knowledge and skills meet minimum criteria) of all semester PID's colloquiums and ECG analysis for the credit test.

At the end of the course independently examine a patient and write a comprehensive Case history of the patient. Students' practical skills of physical examination of a patient and Case history should be evaluated and graded.

The cumulative assessment of this course consists of: PID's (6 colloquiums and 2 ECG's) grade for the whole year (coefficient (k) = 0.2), an evaluation of practical skills (k = 0.2), an evaluation for Case history (k = 0.1), a grade of FCO (k = 0.2), and grade for Final theory Examination* of PID (k = 0.3). All parts are obligatory.

* The Final Theory exam can be taken if a student has positive evaluations, i. e. at least 5, of: 1) all colloquiums, 2) Case history 3) practical skills.

Other provisions to be observed by students during the study of internal medicine. Participation in the practice is compulsory, in accordance with the general dress and hygiene rules of the hospital. Student's absence from classes can only be due to an excused reason. All reporting (colloquia, examinations) is carried out according to the schedule, and the attendance of all students is

mandatory. Attendance at the final examination is compulsory for all students, regardless of the cumulative marks obtained (the examination mark is also cumulative). In case of non-attendance, the examination is considered as failed. No note-taking, talking, use of telephones or other electronic devices (artificial intelligence) is allowed during the colloquia and examinations. Being observed committing prohibited acts will result in being removed from the examination (colloquium). Those participating in the colloquium or examination must have a student ID card.

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Assessment methods

Tests:

Multiple choice questionnaire

Practical assignments:

- clinical examination of a patient and health status assessment;
- · Case History.

Assessment of course of Propedeutics of Internal Diseases

PID final theoretical exam – computerized test (Multiple choice). All the answers should be indicated as correct or incorrect accordingly. The possible number of correct answers or incorrect ones does not exceed four in one question set.

Each colloquium of PID's consist of 50 questions and is evaluated by using 10-point scale or 50 points

The final Theory Examination of PID's consists of 100 questions and its maximum evaluation is 100 points:

- 93–100 points excellent (10);
- 84–92 points very good (9);
- 75–83 points good, with minor mistakes (8);
- 67–74 points average with errors (7);
- 66–59 points below average, with fundamental errors (6);
- 50–58 points satisfy only the minimum requirements (5);

Less than 50 points - the minimum requirements are not met.

All evaluations of PID's colloquiums, ECG's, practical skills', Case history, and the Final Theory exam are considered with decimal places, for example, 9, 55.

Only the cumulative assessment will be rounded.

Minimum pass requirement grade for all PID's colloquiums, ECG's, practical skills', Case history, Final Theory is 5.

Assessment of student's clinical practical skills. The procedure of assessing each student takes place in hospital wards; the student must independently perform systemic clinical examination of a patient — determine the anamnestic data (History taking) and perform a physical examination (inspection, percussion, palpation, auscultation) of patient. The examiner evaluates the practical skills of the student.

The assessment of practical skills consists of 5 areas to be evaluated: 1) Taking a history of a patient (collection data of anamnesis); 2) Applying the systemic and structured approach in the physical examination of a patient; 3) Interpretation of the physical examination data; 4) Semiotic assessment – interpreting clinical signs and symptoms, project into diagnosis; 5) Student's attitudes and ethical behavior.

Assessment of Fundamentals of Clinical Oncology

For colloquium test assessment:

The test consists of the questions with the maximum score of 100 points:

- 90-100 points excellent;
- 80-89 points very good;
- 70-79 points good, with minor mistakes;

- 60-69 points average, with errors;
- 50-59 points below average, with fundamental errors;
- 40-49 points satisfies only the minimum requirements; 30 or less points the minimum requirements are not met.

Clinical skills assessment:

The following tasks performed during practical classes are assessed:

- collecting anamnesis for an oncological patient's case history;
- evaluating and summarizing clinical and laboratory data;
- proposing and justifying the diagnostic and treatment algorithm for each case and explaining the rationale behind the decision made.

Author	Year of public a tion	Title	No of periodical or vol. of publication	Publication place and publisher or Internet link							
Compulsory reading											
Douglas G., Nicol F., Robertson C.	2013	Macleod's Clinical Examination,14th ed.	textbook	Churchill Livingstone Elsvier, Edinburg.							
Epstein O., Perkin D.G., de Bono D.P. & Cookson J.	2008	Clinical Examination, 4th ed.	textbook	Churchill Livingstone Elsevier, London.							
Naudžiūnas A., Sadauskas S., Unikauskas A. ir kiti.	2019	Vidaus ligų diagnostikos pagrindai	textbook	Kaunas:Vitae Litera http://ebooks.vitaelitera.lt/							
McGee S.	2017	Evidence based physical diagnosis, 4th ed.	e book	Elsevier https://www.clinicalkey.com							
DeVita Jr. V.T., Lawrence T.S., Rosenberg S.A. (Editors)	2015	Cancer: principles & practice of oncology. Primer of the Molecular Biology of Cancer, 2nd ed.	book	Philadelphia (Pa): Walters Kluwer/Lippincott Williams & Wilkins							
Juozaitytė E. (sudarytoja)	2014	Onkologija ir hematologija	textbook	Kaunas: Vitae Litera							
Tobias I., Hochhauser D.	2014	Cancer and its management	book	Wiley-Blackwell							
Optional reading											
Danila E., Šatkauskas B.	2009	Klinikinė pulmonologija	book	Vilnius: UAB Vaistų Žinios							
Irnius A., Kupčinskas L. ir kt.	2010	Klinikinė gastroenterologija	book	Vilnius: UAB Vaistų Žinios							
Laucevičius A, Nemickas R., Petrulionienė Ž.	2008	Klinikinės kardiologijos pagrindai	book	Vilnius: UAB Vaistų Žinios							
Miglinas M.	2003	Inkstų ligos	book	Vilnius, UAB "Vaistų žinios"							
Sudaryt. G. Kazanavičius	2009	Endokrinologija	book	Kaunas, UAB "Vitae Litera" http://ebooks.vitaelitera.lt/							
Talley NJ, O'Connor S	2014	Clinical Examination, 8th ed.	e book	Elsevier https://www.clinicalkey.com							
Henderson MC, Tierne LM Jr., Smetana GW		The Patient History: An Evidence-Based Approach to Differential Diagnosis, 2nd ed.	e book	The McGraw-Hill Companies http://accessmedicine.mhmedical.com							
Alastair IJ, Dover AR, Fairhurst K	2018	Macleod's Clinical Examination,14th ed	e book	Elsevier https://www.clinicalkey.com							
Japp AG, Robertson C, Wright RJ, et all.	2018	Macleod's Clinical Diagnosis	e book	Elsevier https://www.clinicalkey.com							

Sandilands EA, Strachan K	2020	Macleod's Essentials of Examination	e book	Elsevier https://www.clinicalkey.com
Gleadal J.	2012	History and Clinical Examination at a Glance	book	Chichester:J.Willey Blackwell
Bayes de Luna A.	2014	ECGs for beginners	e book	John Wiley & Sons, Inc. https://onlinelibrary.wiley.co m
Kumar N, Law A, Choudhry NK.	2016	Teaching Rounds: A Visual Aid to Teaching Internal Medicine Pearls on the Wards	e book	McGraw-Hill Education http://accessmedicine.mhmedi cal.com