



WARSZAWSKI
UNIwersYTET
MEDYCZNY



WARSZAWSKI
UNIwersYTET
MEDYCZNY
—
WYDZIAŁ
LEKARSKI



Medical University of Warsaw
Faculty of Medicine – English Division
61 Żwirki i Wigury Street
02-091 Warsaw, Poland

[http: // www.wum.edu.pl/](http://www.wum.edu.pl/)

4th YEAR CURRICULUM

6-year program

Academic year: 2023/2024

„The property rights, including copyrights, to the syllabus are vested in Medical University of Warsaw. The syllabus can be used for purposes related to education during studies at the Medical University of Warsaw. The use of the syllabus for other purposes requires the consent of the Medical University of Warsaw.”

AUTHORITIES OF MEDICAL UNIVERSITY OF WARSAW – TERM 2020-2024

Rector – Professor Zbigniew Gaciong, MD, PhD

Vice Rector for Student Affairs and Education – Professor Marek Kuch, MD, PhD

Vice Rector for Science and Technology Transfer – Professor Piotr Pruszczyk, MD, PhD

Vice Rector for Human Resources – Professor Agnieszka Cudnoch-Jędrzejewska, MD, PhD

Vice Rector for Clinical Affairs and Investments – Professor Wojciech Lisik, MD, PhD

Vice Rector for International Relations, Development and Promotion – Professor Paweł Włodarski, MD, PhD

FACULTY AUTHORITIES OF MEDICAL UNIVERSITY OF WARSAW – TERM: 2020-2024

Faculty of Medicine – Professor Rafał Krenke MD, PhD

English Division – Faculty of Medicine – Assoc. Prof. Jacek Sieńko, MD, PhD.

DEAN’S OFFICE

Head of the Dean’s Office – Krystyna Jarzab, MA

Student Administration Officer (1st, 2nd, 3rd -Year) – Aleksandra Chilecka

Student Administration Officer (4th, 5th, 6th -Year) – Anna Rosa, MA

STUDENT GOVERNMENT REPRESENTATIVES:

President – Catherine Gartside

Vice President – Michail Koutentakakis

Secretary – Rakesh Roshan

Student Rights’ Representative – Loay Alayoubi

Social Media Coordinator – Ishani Khanna

Events Coordinator – Divil Amarnani, Alexis Vourtsis

Academic Affairs Coordinator – Flynn Ott

www: <https://edsgwum.wixsite.com/edsg>

CLASS REPRESENTATIVE:

Aleksandra Frankowska – 4 year

SCHEDULE – ACADEMIC YEAR 2023/2024

6-year program

WINTER SEMESTER – 01.10.2023 – 18.02.2024

STUDENT'S ACADEMIC CLASSES: 01.10.2023 – 17.12.2023

02.01.2024 – 28.01.2024

WINTER HOLIDAYS: 18.12.2023 – 01.01.2024

EXAM SESSION: 29.01.2024 – 04.02.2024

DAYS OFF BETWEEN SEMESTER: 05.02.2024 – 11.02.2024

RETAKE EXAM SESSION: 12.02.2024 – 18.02.2024

SUMMER SEMESTER – 19.02.2024 – 30.09.2024

STUDENT'S ACADEMIC CLASSES: 19.02.2024 – 28.04.2024

06.05.2024 – 09.06.2024

SPRING HOLIDAYS: 29.04.2024 – 05.05.2024

DAYS OFF BEFORE EXAM SESSION: 10.06.2024 – 16.06.2024

EXAM SESSION: 17.06.2024 – 07.07.2024

SUMMER HOLIDAYS: 08.07.2024 – 30.09.2024

RETAKE EXAM SESSION: 02.09.2024 – 15.09.2024

Curriculum of the 4th year of 6-year 2023/2024 ED program and the list of contents

4th year

page	subject	form of credit	semester	Total no of hours	including				ECTS
					lecture	seminar	class	practical	
5	Dermatology with venerology	exam	2	90	36	4	50		5
11	Infectious Diseases	exam	1	105		45	60		5
18	Urology	exam	2	30		10	20		2
25	Otolaryngology	exam	1	45		18	27		3
31	Pediatric Laryngology		1	15		6	9		
36	Clinical Pharmacology	exam	1	50	15	15	20		5
42	Pediatric Radiology	credit	1&2	18		18			2
47	Surgery	credit	2	110	10	30	70		8
53	Pediatric Surgery	credit	1	30		15	15		2
58	Internal Medicine-Hematology	credit	1&2	30		20	10		2
63	Internal Medicine-Cardiology	credit	1&2	30		10	20		2
68	Internal Medicine-Pulmonology	credit	1	30		20	10		2
72	Internal Medicine-Rheumatology	credit	1&2	30		20	10		2
76	Clinical Immunology	credit	2	20		10	10		1
81	Family Medicine with elements of Geriatriy	credit	2	40		30	10		2
95, 91, 86	Pediatrics (Endo., Gastro., Pulmon.)	credit	1&2	75		30	45		6
100	Psychiatry	credit	1	60		30	30		4
106	Child Psychiatry	credit	1	20		2	18		1
110	Maxillofacial Surgery	credit	1&2	12		12			1
114	Vocational Training	credit	2	140				140	4
	Optional course	credit	1&2	60		60			4
				1040	61	405	434	140	63



DERMATOLOGY & VENEREOLOGY

1. IMPRINT

Academic Year	2023/2024
Department	Faculty of Medicine
Field of study	Medicine
Main scientific discipline	Medical Sciences
Study Profile	General academic
Level of studies	Uniform MSc
Form of studies	6-year, full time studies
Type of module / course	Obligatory
Form of verification of learning outcomes	Exam
Educational Unit / Educational Units	Department of Dermatology (1M4) Address: Koszykowa 82A, 02-008 Warsaw Phone: +48 22 5021324; fax: +48 22 5022106, e-mail: dermatologia@wum.edu.pl
Head of Educational Unit / Heads of Educational Units	Prof. Lidia Rudnicka- Department of Dermatology
Course coordinator	dr n. med. Olga Warszawik-Hendzel - olga.warszawik@gmail.com
Person responsible for syllabus	dr n. med. Olga Warszawik-Hendzel - olga.warszawik@gmail.com

Teachers	Department of Dermatology: Prof. dr hab. n. med. Lidia Rudnicka Prof. dr hab. n. med. Małgorzata Olszewska dr hab. n. med. Joanna Czuwara dr hab. n. med. Beata Młynarczyk-Bonikowska dr hab. n.med. Agnieszka Kalińska-Bienias dr hab. n.med. Adriana Rakowska dr n. med. Marta Sar-Pomian dr n. med. Olga Warszawik-Hendzel dr n. med. Joanna Misiewicz-Wroniak dr n. med. Marta Kurzeja dr n. med. Tomasz Pniewski dr n. med. Iwona Rudnicka dr n. med. Anna Winiarska dr n.med. Dorota Nowicka dr n. med. i n. o zdr. Anna Waśkiel-Burnat dr n. med. i n. o zdr. Leszek Blicharz dr n. med. i n. o zdr. Anna Niemczyk lek. Alicja Kryst lek. Małgorzata Maj lek. Danuta Fedorczyk lek. Magdalena Jasińska lek. Sylwia Chrostowska lek. Patrycja Gajda-Mróż lek. Agnieszka Michalczyk lek. Magdalena Maciejewska lek. Paulina Chmieleńska lek. Katarzyna Pisarz lek. Magdalena Maciejewska lek. Milena Marzęcka lek. Małgorzata Papierzewska lek. Milena Król mgr Michał Zaręba
-----------------	--

2. BASIC INFORMATION				
Year and semester of studies	IV year, 8 th (summer) semester		Number of ECTS credits	5.00
FORMS OF CLASSES		Number of hours	ECTS credits calculation	
Contacting hours with academic teacher				
Lecture (L)		36		
Seminar (S)		4	2	
Classes (C)		50	3	
e-learning (e-L)				
Practical classes (PC)				
Work placement (WP)				

Unassisted student's work		
Preparation for classes and completions	20	

3. COURSE OBJECTIVES

O1	<p>The aim of the course is giving medical students basic information about:</p> <ol style="list-style-type: none"> 1. Etiology and symptoms of the most common dermatological diseases and dermatological correct terminology. 2. Diagnostic procedures and tests used in dermatology and interpretation of their results. 3. Management of the most common dermatological diseases.
----	--

4. STANDARDS OF LEARNING – DETAILED DESCRIPTION OF EFFECTS OF LEARNING (concerns fields of study regulated by the Regulation of Minister of Science and Higher Education from 26 of July 2019; does not apply to other fields of study)

Code and number of effect of learning in accordance with standards of learning	Effects in the field of: <i>(in accordance with appendix to the Regulation of Minister of Science and Higher education from 26th of July 2019)</i>
---	---

Knowledge – Graduate* knows and understands:

G.K1	Student has symptomatology knowledge of the most common dermatological diseases and dermatological correct terminology. E.W1; E.W35
G.K2	Student has knowledge of etiopathogenesis, epidemiology, clinical presentation, diagnosis and treatment of the most common infectious and non-infectious diseases of skin, hair, nails and mucous membranes. E.W1; E.W35; E.W7.7; E.W7.8; E.W33; E.W37
G.K3	Student has knowledge of etiopathogenesis, epidemiology, clinical presentation, diagnosis and treatment of nevus, benign and malignant tumors of the skin. E.W23; E.W25; E.W26
G.K4	Student has knowledge of skin lesions associated with diseases of internal organs and systemic diseases. E.W7.7
G.K5	Student has knowledge of etiopathogenesis, epidemiology, clinical presentation, diagnosis and treatment of sexually transmitted diseases. E.W34; E.W36

Skills– Graduate* is able to:

G.S1	Student is able to make an appropriate, focused and comprehensive history E.U38
G.S2	Student is able to deal with complex patients (e.g. angry or distressed patient) and communicate effectively with patients from diverse backgrounds E.U13,
G.S3	Student is able to undertake an appropriate, focused and comprehensive examination of mental and physical state E.U13
G.S4	Student is able to gather information by the technique of the observation, direct and indirect measurements (scales) analysis of documentation formulate a focussed and relevant series of investigations E.U12; E.U18; E.U24; E.U32

* In appendix to the Regulation of Minister of Science and Higher education from 26th of July 2019 „graduate”, not student is mentioned.

5. ADDITIONAL EFFECTS OF LEARNING (non-compulsory)	
Number of effect of learning	Effects in the fields of:
Knowledge – Graduate knows and understands:	
K1	
Skills– Graduate is able to:	
S1	
Social Competencies – Graduate is ready for:	
SC1	<i>Student is active during the course, punctual and conscientious</i>
SC2	<i>Student is able to cooperate as a part of a medical-nursing team</i>
SC3	<i>Student is able to work by themselves at the patient's bedside, helps patient during the examination, shows adequate empathy towards patient</i>
SC4	<i>Student maintains confidentiality</i>

6. CLASSES		
Form of class	Class contents	Effects of Learning
SEMINARIES	S1 Introduction to dermatology S2 Bacterial infections, Borrelia infections S3 Fungal infections S4 Viral infections S5 Lupus S6 Photodermatoses S7 Drug eruption S8 Psoriasis S9 Melanocytic nevi and melanoma; Nonmelanoma skin cancer S10 Paraneoplastic diseases S11 Lymphom S12 Lichen planus; mucous membranes diseases S13 Photogenesis Cutaneous and mucosae symptoms S14 Allergic diseases S15 Dermatosurgery and lasers S16 Scleroderma S17 Acne S18 Epidemiology of STD S19 Syphilis: Acquired early S20 Syphilis: Acquired early late; Hereditary, Serology S21 Viral infections – genital warts	E.W1; E.W35 E.W1; E.W35; E.W7.7; E.W7.8; E.W33; E.W37 E.W23; E.W25; E.W26; E.W34; E.W36;
CLASSES	Topics of classes (Dermatology) The classes will take place at both outpatient and inpatient department. Students will assist current admissions with the emphasis to the most frequent diagnosis i.e. psoriasis, human papillomavirus infections, pediatric dermatology, collagen diseases, skin cancer. Special concern will be taken to	

	<p>the diseases presented on lectures and additionally on cutaneous symptoms of diabetes and leg ulcer. Following topics not included to lectures will be discussed:</p> <p>C1 Alopecia areata C2 Dermatomyositis C3 Dermatological treatment a) Diagnostic and therapeutic techniques b) Operative procedures C4 Erythema multiforme C5 Erythema nodosum C6. Erythrasma C7 Infestations a) Scabies b) Pediculosis c) Tics C8 Leukocytoclastic vasculitis C9 Lichen planus C10 Pityriasis rosea C11 PLEVA C12 Premalignant skin conditions C13. Rosacea C14 Sarcoidosis C15 Skin manifestations in diabetes C16 Tuberculosis C17 Venous leg ulcer C18 Vitiligo C19 Pyoderma gangrenosum C20 Seborrhoeic dermatitis</p> <p>Topics of laboratory classes and case presentation (Venereal diseases) C21 Laboratory exercises C22 Case presentation</p>	
--	--	--

7. LITERATURE
Obligatory
Fitzpatrick's Color Atlas and Synopsis of Clinical Dermatology, Seventh Edition McGraw-Hill, New York
Supplementary
D.J. Gawkrödger: An Illustrated Colour Text. Dermatology. Second ed. Churchill Livingstone, Edinburgh 1998 J.A.A. Hunter, J.A. Savin, M.V. Dahl: Clinical Dermatology, 3 rd ed. Oxford, Blackwell Scientific Publications 2002

8. VERIFYING THE EFFECT OF LEARNING		
Code of the course effect of learning	Ways of verifying the effect of learning	Completion criterion

G.K1	<p>A Dermatology credit is given by a group assistant upon a test of theoretical knowledge and practical skills (skin examination - description of skin lesions).</p> <p>To receive a credit students must obligatory attend the classes and lectures. In exceptional cases one day can be missed but only if student will make up missing classes according to group assistant guidelines. For those who will not get a credit on the last day of the course, an additional and final date for a retake will be provided by the group assistant within maximum 2 weeks after the end of the course.</p>	Colloquium
G. K2	<p>The final Dermatology & Venerology exam for 6 is scheduled in June 2023 This will be an MCQ test.</p> <p>The exam grade will be:</p> <p>2 = poor learning outcome</p> <p>3</p> <p>3.5</p> <p>4</p> <p>4.5</p> <p>5 = meet all the criteria of assessment</p> <p>To pass the exam student will need 3 or more.</p>	<p>2,0 (unsatisfactory) - final exam- below 51% good answers</p> <p>3,0 (satisfactory) – according to Gausse curve</p> <p>3,5 (better than satisfactory) – according to Gausse curve</p> <p>4,0 (good) – according to Gausse curve</p> <p>4,5 (better than good) – according to Gausse curve</p> <p>5,0 (very good) – according to Gausse curve</p>

9. ADDITIONAL INFORMATION (*information essential for the course instructor that are not included in the other part of the course syllabus e.g. if the course is related to scientific research, detailed description of, information about the Science Club*)

ATTENTION

The final 10 minutes of the last class in the block/semester/year should be allocated to students' Survey of Evaluation of Classes and Academic Teachers.



Infectious Diseases

1. IMPRINT

Academic Year	2023/2024
Department	Faculty of Medicine
Field of study	Medicine
Main scientific discipline	Medical sciences
Study Profile	General academic
Level of studies	Uniform MSc
Form of studies	Full time studies
Type of module / course	obligatory
Form of verification of learning outcomes	exam
Educational Unit / Educational Units	Department of Adult's Infectious Diseases; Department of Pediatric Infectious Diseases; 01-201 Warsaw, 37 Wolska St., tel. 48 22 33 55 288
Head of Educational Unit / Heads of Educational Units	Profesor Andrzej Horban Profesor Magdalena Marczyńska
Course coordinator	Profesor Andrzej Horban ahorban@zakazny.pl, dr n.med. Agnieszka Bednarska abednarska@zakazny.pl
Person responsible for syllabus	Dr n.med. Agnieszka Bednarska, Ewa Ciostek ewa.ciostek@wum.edu.pl

Teachers	prof. Andrzej Horban Dr n.med. Dawid Porowski Dr n.med. Agnieszka Bednarska Dr n.med. Marcin Paciorek Dr n.med. Joanna Raczyńska dr n.med. Agata Skrzat-Klapaczyńska Lek. Filip Fijołek Lek. Carlo Bieńkowski Dr n.med. Dominik Bursa Lek. Dominika Krogulec lek. Michał Makowiecki Lek. Anna Furman-Dłubała Dr n.med. Jolanta Popielska Dr n.med. Ewa Talarek Dr n.med. Konrad Zawadka Prof. Maria Pokorska-Śpiewak Dr n. med. Magdalena Pluta Lek. Maja Pietrzak
-----------------	---

2. BASIC INFORMATION			
Year and semester of studies	4 th year, VII semester	Number of ECTS credits	5
FORMS OF CLASSES		Number of hours	ECTS credits calculation
Contacting hours with academic teacher			
Lecture (L)			
Seminar (S)		45	1,8
Discussions (D)		60	2,4
e-learning (e-L)			
Practical classes (PC)			
Work placement (WP)			
Unassisted student's work			
Preparation for classes and completions		20	0,8

3. COURSE OBJECTIVES	
O1	1. The students is supposed to gain the knowledge about the epidemiology, diagnostics, treatment and prevention of infectious diseases in adults and children.

4. STANDARDS OF LEARNING – DETAILED DESCRIPTION OF EFFECTS OF LEARNING <i>(concerns fields of study regulated by the Regulation of Minister of Science and Higher Education from 26 of July 2019; does not apply to other fields of study)</i>	
Code and number of effect of learning in accordance with standards of learning	Effects in the field of: <i>(in accordance with appendix to the Regulation of Minister of Science and Higher education from 26th of July 2019)</i>

Knowledge – Graduate* knows and understands:

E.W7c	knows and understands the causes, symptoms, principles of diagnosis and therapeutic management in relation to the most common internal diseases occurring in adults and their complications. Digestive system diseases. Including diseases: oral cavity, esophagus, stomach and duodenum, intestine, pancreas, liver, biliary tract and gall bladder
E.W 14d	knows and understands the causes, symptoms, diagnostics and therapy principles in the most common nervous system diseases, including nervous system infections, meningitis, Lyme disease, HSV encephalitis
E.W32	knows and understands the causes, symptoms, diagnostics and therapy principles in the most common bacterial, viral, fungal and parasitic diseases, including pneumococcal diseases, viral hepatitis, AIDS, sepsis and nosocomial infections
E.W34	knows and understands the causes, symptoms, diagnostics and therapy principles in the most common sexual-transmitted diseases: syphilis, HPV, HSV, HBV, HIV
E.W37	knows the types of biological materials used in laboratory diagnostics and principles of obtaining samples for microbiologic testing
E.W40	knows the indications for implementation of monitored therapy – in chronic infectious diseases (mainly HIV, HBV, HCV infection)
E.W3e,h,i	know and understand the causes, symptoms, diagnosis and therapeutic procedure rules for the most common diseases of children: acute, chronic diseases of the abdomen, vomiting, diarrhea and other acquired gastrointestinal disease, cerebral palsy, brain inflammation and tires of CSF, epilepsy, the most common childhood infectious diseases
E.W6	know the most common life-threatening States in children and in these States

Skills– Graduate* is able to:

E.U1	takes medical interview with adult patient
E.U2	takes medical interview with a child and guardians
E.U3	takes full and targeted physical examination of adult patient
E.U7	evaluates patient's general condition and state of consciousness

E.U9	knows how to wield percentiles charts in anthropometric and blood pressure measurements
E.U10	evaluates the grade of sexual development
E.U12	perform the differential diagnosis of the most common diseases in adults and children
E.U13	evaluates and describes somatic and psychological condition of a patient
E.U14	recognizes life- treating conditions
E.U15	recognizes symptoms of alcohol, narcotics and other stimulants use
E.U16	plans to conduct diagnostic, therapeutic and prophylactic
E.U17	performs analysis of possible drugs adverse effects and interactions
E.U19	Recognizes drug dependences symptoms and proposes treatment management
E.U20	qualifies patients for hospital or ambulatory therapy
E.U24	interprets results of laboratory tests and identifies the causes of abnormalities
E.U26	plans management after exposure for blood- transmitted infections
E.U28	obtains materials for laboratory diagnostics
E.U29a,b,f	performs basic procedures: -temperature, heart rate and blood pressure measurements -vital signs monitoring with cardiac monitor and puls oximeter -taking throat, nasal and skin swabs,
E.U30e	assists at lumbar puncture

* In appendix to the Regulation of Minister of Science and Higher education from 26th of July 2019 „graduate”, not student is mentioned.

5. ADDITIONAL EFFECTS OF LEARNING (non-compulsory)	
Number of effect of learning	Effects in the fields of:
Knowledge – Graduate knows and understands:	
E.W10	basic principles of pharmacotherapy of infectious diseases in the elderly
E.W15	basic concepts of pathogenesis of infectious diseases
E.W31	the role of medical rehabilitation
Skills– Graduate is able to:	

S1	
----	--

Social Competencies – Graduate is ready for:

SC1	The student is able to establish and maintain deep and respectful contact with the patient
SC2	The student is Guidem by the good of the patient,putting them first
SC3	The student respects medical confidentiality and patient`s rights

6. CLASSES		
Form of class	Class contents	Effects of Learning
	<i>S1 – Laboratory diagnosis of infectious diseases</i>	
Seminar:	<i>S2- Approache to patient with fever of unknown origin</i>	
	<i>S3-Infections in transplant recipients and patients with cancer</i>	
	<i>S4- Pharyngitis, sinusitis, otitis. Infectious bronchitis. Infectious bronchiectasis.</i>	
	<i>S5- Oportunistic infectionsn in HIV/AIDS patients-diagnostis and treatment.</i>	
	<i>S6- Fever and rash.</i>	
	<i>S7- Acute bacterial meningitis including Listeria monocytogenes infection</i>	
	<i>S8- Pneumonia and lung abcesses</i>	
	<i>S9- Nosocomial infetions</i>	
	<i>S10- Traetment of bacterial infections</i>	
	<i>S11- Acute and chronic viral hepatitis</i>	
	<i>S12 Emerging infections</i>	
	<i>S13- Systemic fungal infections</i>	
	<i>S14- Infectious osteomyelitis and arthritis</i>	
	<i>S15- Parasitic diseases</i>	
	<i>S16- C. difficile and other clostridial infections</i>	
	<i>S17 – Brain abscesses and empyema</i>	
	<i>S18- Malaria. Travel medicine</i>	
	<i>S19 – HIV infection</i>	
	<i>S20- Sepsis and septic shock</i>	

	<i>S21- Viral infections of CNS. Chronic and recurrent meningitidis</i>	
	<i>S22- Intraabdominal infections including abscesses and peritonitis</i>	
	<i>S23- Acute infectious diarrheal diseases</i>	
	<i>S24- Tick-borne diseases</i>	
	<i>S25- Infections of the skin, muscled, and soft tissues, infectious complications of bites ang burns</i>	
	<i>S26- Urinary tract infection and STD</i>	
	<i>S27- Infective endocarditis and pericarditis</i>	
	<i>S28 HIV infection in children</i>	
	<i>S29 Exanthematous diseases in children</i>	
	<i>S30 Respiratory tract infections in children</i>	
	<i>S31 Acute infectious diarrheal diseases in children</i>	
	<i>S32 Viral infection in children</i>	
	<i>S33 Immunization principle and vaccine use</i>	
	<i>S34 Congenital infections</i>	

7. LITERATURE

Obligatory

1. Harrison`s Infectious Diseases, 3rd Edition 2017
Dennis L. Kasper, Anthony S. Fauci
2. 4. Clinical Microbiology made ridiculously simple. M.Gladwin, W.Trattler, C.S.Mahan, 7th Edition

Supplementary

1. Nelson Textbook of Pediatrics. Kliegman, Stanton, St.Geme, Schor - 20th Edition, Saunders 2016
2. Feigin and Cherry`s Textbook of Pediatric Infectious Diseases, J.Cherry, G.Harrison, S.Kaplan, W.Steinbach, P. Hotez, 7th Edition, Elsevier 2014
3. Principles and Practise of Pediatric Infectious Diseases. Long S., Pickering L.K., Prober C.G., Elsevier 2014
4. Infectious Diseases, G. Mandel, J. Benett, R. Dolin;

8. VERIFYING THE EFFECT OF LEARNING

Code of the course effect of learning	Ways of verifying the effect of learning	Completion criterion
<i>e.g. G.K1, G.S1, K1</i>	<i>This field defines the methods used for grading students e.g. pop quiz, test, written report etc.</i>	<i>e.g. threshold number of points</i>
W01--8	e-learning	attendance
All	Final test, report	2,0 3,0 3,5

		4,0 4,5 5,0
--	--	-------------------

9. ADDITIONAL INFORMATION (*information essential for the course instructor that are not included in the other part of the course syllabus e.g. if the course is related to scientific research, detailed description of, information about the Science Club*)

Medical University of Warsaw has property rights, including copyright, to the syllabus. The syllabus may be used for educational purposes at the MUW only. Using of the syllabus for other purposes requires consent of the MUW.

ATTENTION

The final 10 minutes of the last class in the block/semester/year should be allocated to students' Survey of Evaluation of Classes and Academic Teachers.



UROLOGY

1. IMPRINT

Academic Year	2023/2024
Department	Faculty of Medicine
Field of study	Medicine
Main scientific discipline	Medical sciences
Study Profile	General academic
Level of studies	Uniform MSc
Form of studies	Full time studies
Type of module / course	Obligatory
Form of verification of learning outcomes	Exam
Educational Unit / Educational Units	Chair and Department of General, Oncological and Functional Urology (1M7) Infant Jesus Teaching Hospital Urology – building no. 7 4 Lindleya St., 02-005 Warsaw, e-mail: urologia@wum.edu.pl Phone: 48 22 502 17 23/ 02.
Head of Educational Unit / Heads of Educational Units	Prof. Piotr Radziszewski MD PhD

Course coordinator	Dr. Waldemar Szabłoński MD PhD, e-mail: wszablonski@wum.edu.pl
Person responsible for syllabus	Dr. Waldemar Szabłoński MD PhD, e-mail: wszablonski@wum.edu.pl
Teachers	Prof. Piotr Radziszewski MD PhD Assoc. Prof. Tomasz Borkowski MD PhD Dr Emilia Pawłowska – Krajka MD PhD Dr. Waldemar Szabłoński MD PhD Dr. Łukasz Zapała MD PhD Dr. Sylwia Bender MD Dr. Tomasz Piecha MD PhD Dr. Piotr Zapała MD PhD Dr. Adrian Podkański MD

2. BASIC INFORMATION

Year and semester of studies	4 year 8 semester	Number of ECTS credits	2.00
FORMS OF CLASSES		Number of hours	ECTS credits calculation
Contacting hours with academic teacher			
Lecture (L)		-	-
Seminar (S)		10	0,5
Classes (C)		20	0,5
e-learning (e-L)		-	-
Practical classes (PC)		-	-
Work placement (WP)		-	-
Unassisted student's work			
Preparation for classes and completions		30	1,0

3. COURSE OBJECTIVES

O1	To get acquainted with terminology used in urology
O2	To know which diseases and conditions are treated by urologists and which patients should be referred to the specialist To know strategies of initial evaluation of patients with symptoms from the urinary and male genital tract
O3	To know basic therapies in most common urological diseases
O4	To know urgent conditions and their consequences. To be able to carry out differential diagnosis and initial management.

05	To know risk factors, methods of screening and preventive measures of genitourinary malignancies
06	To know symptoms, work-up, staging and management of localized and advanced genitourinary malignancies.
07	To understand physiology of lower urinary tract and mechanisms of urine incontinence and retention.
08	To be able to catheterize the patient

4. STANDARDS OF LEARNING – DETAILED DESCRIPTION OF EFFECTS OF LEARNING (*concerns fields of study regulated by the Regulation of Minister of Science and Higher Education from 26 of July 2019; does not apply to other fields of study*)

Code and number of effect of learning in accordance with standards of learning	Effects in the field of: (<i>in accordance with appendix to the Regulation of Minister of Science and Higher education from 26th of July 2019</i>)
---	---

Knowledge – Graduate* knows and understands:

E.W7 p. 5	knows and understands the etiology, symptoms, principles of diagnosis and therapeutic management of the urinary stone disease E.W7 p. 5: reasons, symptoms, diagnostic and treatment procedures of the most frequent internal diseases and their complications in adult patients: 5) renal and urinary tract diseases, including acute and chronic renal failure, glomerulus and interstitial renal diseases, renal cysts, nephrolithiasis, urinary system infections, urinary system cancers, including bladder tumour and kidney cancer,
E.W7.	knows and understands the etiology, symptoms, principles of diagnosis and therapeutic management in relation to urinary tract infections,
E.W7.	knows and understands the etiology, symptoms, principles of diagnosis and therapeutic management of urinary tract neoplasms, particularly prostate cancer, bladder cancer, renal cancer, testicular cancer, testicular cancer, penile cancer.
E.W7.	knows and understands the etiology, symptoms, principles of diagnosis and therapeutic management of prostate diseases
E.W7.	knows and understands the etiology, symptoms, principles of diagnosis and therapeutic management of urinary incontinence and other functional disorders of the lower urinary tract
E.W7.	knows and understands the etiology, symptoms, principles of diagnosis and therapeutic management of the genitourinary tract trauma
E.W7.	knows and understands the etiology, symptoms, principles of diagnosis and therapeutic management of urological emergencies

Skills– Graduate* is able to:

F.U23	can assess the indications for suprapubic puncture and participates in the procedure;
F.U24	assists with common urological procedures (diagnostic and therapeutic endoscopic procedures, lithotripsy, prostate cancer biopsy);
E.U29 g	can perform urinary bladder catheterization in women and men.

* In appendix to the Regulation of Minister of Science and Higher education from 26th of July 2019 „graduate”, not student is mentioned.

5. ADDITIONAL EFFECTS OF LEARNING (*non-compulsory*)

Number of effect of learning	Effects in the fields of:
Knowledge – Graduate knows and understands:	
K1	
Skills– Graduate is able to:	
S1	
Social Competencies – Graduate is ready for:	
SC1	

6. CLASSES		
Form of class	Class contents	Effects of Learning
S1 - seminar	Symptoms. Instruments. Terminology	W6 U1 U2 U3
S2 - seminar	Urolithiasis	W1
S3 - seminar	Urological Oncology (neoplasms of the kidney, the bladder, the testis, and the penis)	W3
S4 - seminar	Emergency in urology	W7
S5 - seminar	Diseases of the prostate (Prostate Cancer)	W3 W4
S6 - seminar	Diseases of the prostate (Benign Prostatic Hyperplasia)	W3 W4
S7 - seminar	Urinary incontinence and other functional disorders of the lower urinary tract	W5
S8 - seminar	Traumatology of the genitourinary tract	W6
S9 - seminar	Neurogenic Bladder	W5
C1 – practical classes	The ward	U1-3
C2 – practical classes	Operating theater	W1-6 U1-3
C3 – practical classes	Surgical treatment of urolithiasis	W1
C4 – practical classes	One day clinic/Outpatient	U1-3

7. LITERATURE
Obligatory
E-medicine: http://emedicine.medscape.com/urology For Polish speaking students: A. Borkowski et al.: Urologia. Podręcznik dla studentów medycyny. PZWL 2008
Supplementary
Obligatory literature: E-medicine: http://emedicine.medscape.com/urology For Polish speaking students: A. Borkowski et al.: Urologia. Podręcznik dla studentów medycyny. PZWL 2008

Supplementary literature:

European Association of Urology Guidelines: <http://uroweb.org/guidelines/>

Supplementary MEDTUBE activities**QUESTIONNAIRE IPSS (LUTS):**

https://qxmd.com/calculate/calculator_338/international-prostate-symptom-score-ipss

QUESTIONNAIRE IIEF-5 (ED):

https://qxmd.com/calculate/calculator_377/international-index-of-erectile-function-iief-5

Bladder Cancer Risk Calculator (NMIBC):

<https://www.eortc.be/tools/bladdercalculator/>

European Urological Association - GUIDELINES:

<https://uroweb.org/guidelines/>

American Urological Association - GUIDELINES:

<https://www.auanet.org/guidelines>

European Urology – official journal of European association of Urology:

<https://www.europeanurology.com/>

MEDICAL FILMS (available after registration):

<https://medtube.pl/users/register>

RECOMENDED FILMS:**ACUTE URINARY RETENTION****CATHETERISATION**

<https://medtube.pl/urologia/filmy-medyczne/21952-cewnikowanie-pecherza-moczowego-u-kobiety>

CYSTOSTOMY

<https://medtube.pl/urologia/filmy-medyczne/21948-nadlonowa-instalacja-cewnika-do-pecherza-moczowego>

<https://medtube.pl/urologia/filmy-medyczne/21785-cystostomia>

BLADDER CANCER**CYSTOSCOPY**

<https://medtube.pl/urologia/filmy-medyczne/16190-cystoskopia-animacja>

TK

<https://medtube.pl/urologia/filmy-medyczne/9805-guz-pecherza-moczowego-t4-tomografia-komputerowa>

TURBT

<https://medtube.pl/urologia/filmy-medyczne/13156-turbt-przezcewkowa-elektroresekcja-skalcyfikowanego-guza-pecherza-moczowego>

<https://medtube.pl/urologia/filmy-medyczne/21565-turbt-endoskopowa-przezcewkowa-elektroresekcja-guza-pecherza-moczowego>

<https://medtube.pl/urologia/filmy-medyczne/14879-przezcewkowa-resekcja-guza-pecherza-moczowego>

OPEN RADICAL CYSTECTOMY

<https://medtube.pl/urologia/filmy-medyczne/16159-radykalna-cystektomia-i-nadpechrzowe-odprowadzenie-moczu-sposobem-brickera>

<https://medtube.pl/urologia/filmy-medyczne/12764-radykalna-cystektomia-oszczedzajaca-nerwy-i-ortotopowe-zastapienie-pecherza-moczowego-u-kobiety>

ROBOTIC RADICAL CYSTECTOMY

<https://medtube.pl/urologia/filmy-medyczne/12783-laparoskopowa-radykalna-cystoprostatektomia-w-asystcie-robota>

KIDNEY CANCER**LAPAROSCOPIC PARTIAL NEPHRECTOMY (NSS)**

<https://medtube.pl/urologia/filmy-medyczne/12326-laparoskopowe-czesciowe-usuniecie-nerki-z-powodu-guza-w-przypadku-nerki-pojedynczej>

OPEN PARTIAL NEPHRECTOMY (NSS)

<https://medtube.pl/urologia/filmy-medyczne/15079-nefrektomia-czesciowa-metoda-otwarta>

LAPAROSCOPIC NEPHRECTOMY

<https://medtube.pl/urologia/filmy-medyczne/208-radykalna-nefrektomia-laparoskopowa-w-raku-nerki>

<https://medtube.pl/urologia/filmy-medyczne/12788-laparoskopowa-jednostronna-nefrektomia-endoskopowa>

PROSTATE CANCER**PROSTATE BIOPSY**

<https://medtube.pl/urologia/filmy-medyczne/4338-biopsja-gruczolu-kroowego-prostaty>
OPEN RETROPUBIC PROSTATECTOMY
<https://medtube.pl/urologia/filmy-medyczne/12771-radykalna-prostatektomia-zalonowa>
LAPAROSCOPIC PROSTATECTOMY
<https://medtube.pl/urologia/filmy-medyczne/24532-laparoskopowa-radykalna-prostatektomia>
<https://medtube.pl/urologia/filmy-medyczne/16192-laparoskopowa-radykalna-prostatektomia>
<https://medtube.pl/urologia/filmy-medyczne/16234-laparoskopowa-radykalna-prostatektomia-z-zaoszczedzeniem-nerwow>
ROBOTIC PROSTATECTOMY
<https://medtube.pl/urologia/filmy-medyczne/2452-prostatektomia-z-uzyciem-roboty>
<https://medtube.pl/urologia/filmy-medyczne/12791-prostatektomia>
<https://medtube.pl/urologia/filmy-medyczne/2452-prostatektomia-z-uzyciem-roboty>
<https://medtube.pl/urologia/filmy-medyczne/4331-prostatektomia-robotowa-hd-davinci-czesc-2>

PHIMOSIS

CIRCUMCISION

<https://medtube.pl/urologia/filmy-medyczne/15948-obrzezanie-u-doroslego-mezczyzny>

BENIGN PROSTATIC HYPERPLASIA (BPH)

TURP

<https://medtube.pl/urologia/filmy-medyczne/2453-turp-przezcewkowa-elektroresekcja-gruczolu-kroowego>

PROSTATE ENUCLEATION

<https://medtube.pl/urologia/filmy-medyczne/21565-turbt-endoskopowa-przezcewkowa-elektroresekcja-guza-pecherza-moczowego>

UROLITHIASIS

ESWL

<https://medtube.pl/urologia/filmy-medyczne/2447-eswl-pozaustrojowe-usuwanie-kamieni-moczowych-przy-uzyciu-fali-akustycznej>

URL

<https://medtube.pl/urologia/filmy-medyczne/2455-ureteroskopia-i-laserowa-litotrypsja-wziernikowanie-moczowodu-i-laserowe-rozkruszanie-kamieni>

<https://medtube.pl/urologia/filmy-medyczne/213-kamica-moczowodowa-ewakuacja-kamienia>

RIRS

<https://medtube.pl/urologia/filmy-medyczne/3819-metoda-rirs>

PCNL

<https://medtube.pl/urologia/filmy-medyczne/2450-pcnl-przezskorna-nefrolitotrypsja>

ECIRS (=PCNL + URS)

<https://medtube.pl/urologia/filmy-medyczne/24716-kamica-nerkowa-ecirs>

TESTICULAR HYDROCELE

HYDROCELECTOMY

<https://medtube.pl/urologia/filmy-medyczne/16821-wyciecie-wodniaka-jadra>

PENILE CANCER

PARTIAL PENECTOMY

<https://medtube.pl/urologia/filmy-medyczne/21447-czesciowa-resekcja-pracia>

AND OTHERS:

<https://medtube.pl/urologia>

8. VERIFYING THE EFFECT OF LEARNING

Code of the course effect of learning	Ways of verifying the effect of learning	Completion criterion
e.g. G.K1, G.S1, K1	<i>This field defines the methods used for grading students e.g. pop quiz, test, written report etc.</i>	<i>e.g. threshold number of points</i>
E.W7	Test exam	2.0 (failed) less than 18 points from the test 3.0 (satisfactory) 18-21 points from the test

		3.5 (rather good) 22-24 points from the test 4.0 (good) 25-26 points from the test 4.5 (more than good) 27-28 points from the test 5.0 (very good) 29-30 points from the test
F.U23, F.U24, E.U29	active participation and correct execution of tasks	Confirmed assistance to obligatory procedures

9. ADDITIONAL INFORMATION (*information essential for the course instructor that are not included in the other part of the course syllabus e.g. if the course is related to scientific research, detailed description of, information about the Science Club*)

1. Practical classes take place in the Clinic of General, Oncological and Functional Urology, located Warszawa, 4 Lindleya Street, building 7, from 08.00 AM – 11.00 AM practical classes, 11.00 AM - 12.30 PM seminars.
2. Moreover, you can find seminars as presentations on the e-learning platform.
3. Practical classes are obligatory. In order to pass the course, you must attend all the classes (100% presence). In case of any absence, it can only be retake with the next course group.
4. During the practical classes students are required to wear scrubs and hospital shoes.
5. Mobile phones in the operating room are strictly forbidden.

ELECTRONIC EXAMINATION IN UROLOGY for 4th year students of the English Division 6y

We would like to inform that:

1. Students taking the exam should log in the Examination Portal, available at:
<https://egzaminy.wum.edu.pl/>
Login data for Examination Portal **are the same as for others MUW systems**. Details on logging can be found here:
<http://it.wum.edu.pl/english> **ATTENTION! Login data will also be needed to start the exam.**
2. Registration for the exam shall be possible via the Examination Portal .
3. The exam will be held in rooms **231/1** and **233/1** at the Didactic Center building (ul. Trojdena 2a)
4. The exam test will consist of **30** single choice questions, time to take the exam will be **30** minutes and the passing grade: **60%**. Results will be available immediately after the test.
5. For any questions or problems with the operation of the examination system, please contact the Office for Quality and Innovation Teaching: Main Library building, room 209, tel. (22) 57 20 258, e-mail: egzaminy@wum.edu.pl

Students scientific group: Students interested in discipline should contact dr Waldemar Szabłoński in October.

Medical University of Warsaw has property rights, including copyright, to the syllabus. The syllabus may be used for educational purposes at the MUW only. Using of the syllabus for other purposes requires consent of the MUW.

ATTENTION

The final 10 minutes of the last class in the block/semester/year should be allocated to students' Survey of Evaluation of Classes and Academic Teachers.



OTOLARYNGOLOGY

1. IMPRINT

Academic Year	2023/2024
Department	Faculty of Medicine
Field of study	Medicine
Main scientific discipline	Medical sciences
Study Profile	General academic
Level of studies	Uniform MSc
Form of studies	Full time studies
Type of module / course	Obligatory
Form of verification of learning outcomes	Exam
Educational Unit / Educational Units	Department of Otorhinolaryngology, Head and Neck Surgery, 02-097 Warsaw Banacha 1a, tel.: (48 22) 59 92 521, (48 22) 59 91 721; e-mail: otolaryngology@wum.edu.pl
Head of Educational Unit / Heads of Educational Units	Profesor Kazimierz Niemczyk, M.D. Ph. D

Course coordinator	Dr n. med. Małgorzata Czesak, mczesak@wum.edu.pl Dr n. med. Klaudyna Zwierzyńska-Irla, kzwierzynska@wum.edu.pl
Person responsible for syllabus	Dr n. med. Małgorzata Czesak, mczesak@wum.edu.pl Dr n. med. Klaudyna Zwierzyńska-Irla, kzwierzynska@wum.edu.pl
Teachers	dr hab. n. med. Anna Rzepakowska, dr hab. n. med. Tomasz Gotlib, dr n. med. Jacek Sokołowski, dr n. med. Magdalena Arcimowicz, dr n. med. Arkadiusz Paprocki, dr n. med. Małgorzata Czesak, dr n. med. Klaudyna Zwierzyńska-Irla, dr n. med. Małgorzata Litwiniuk-Kosmala, dr n. med. Magdalena Kuźmińska, dr n. med. Maria Makuszevska, lek. Przemysław Krawczyk, lek. Jakub Pachla, lek. Maria Molga-Magusiak, lek. Agnieszka Jasińska-Nowacka, lek. Agata Szleper, lek. Patrycja Torchalla, lek. Wojciech Kimak, lek. Michał Leszczyński, lek. Michał Żurek, lek. Ewa Kucharska, lek. Natalia Chmura.

2. BASIC INFORMATION

Year and semester of studies	4th year ; 1st semester	Number of ECTS credits	2.00
FORMS OF CLASSES		Number of hours	ECTS credits calculation
Contacting hours with academic teacher			
Lecture (L)		0	0
Seminar (S)		18	0,5
Classes (C)		27	1,2
e-learning (e-L)		0	0
Practical classes (PC)		0	0
Work placement (WP)		0	0
Unassisted student's work			

Preparation for classes and completions	40	0,3
---	----	-----

3. COURSE OBJECTIVES

O1	Basic knowledge of head and neck anatomy and pathology. causes, clinical course, treatment methods, complications and prognosis in diseases of the ears, nose and paranasal sinuses, mouth, throat and larynx
O2	Ability of ENT examination.
O3	Principles of diagnostic and therapeutic management in head and neck cancers.
O4	Rules of conduct in emergency situations in otorhinolaryngology, in particular breathlessness laryngeal, nose bleeding, fractures.
O5	Principles of diagnostic and therapeutic procedures in disorders of hearing, voice and speech.

4. STANDARDS OF LEARNING – DETAILED DESCRIPTION OF EFFECTS OF LEARNING (concerns fields of study regulated by the Regulation of Minister of Science and Higher Education from 26 of July 2019; does not apply to other fields of study)

Code and number of effect of learning in accordance with standards of learning	Effects in the field of: <i>(in accordance with appendix to the Regulation of Minister of Science and Higher education from 26th of July 2019)</i>
--	--

Knowledge – Graduate* knows and understands:

F.W1 p. 3, 4	Causes, symptoms, principles of diagnosis and therapeutic procedure in relation to the most common diseases requiring surgical intervention, taking into account the differences in childhood, in particular: 3) limb and head diseases, 4) bone fractures and organ injuries;
F.W3	Qualification rules for basic surgical procedures and invasive diagnostic and therapeutic procedures, rules for their performance and the most common complications
F.W10 p. 1	Problems of imaging tests used today, in particular: 1) Radiological symptomatology of basic otolaryngology diseases
F.W12	Issues in the field of ENT, phoniatics and audiology, including: a. reasons, clinical outcome, treatment, prognosis and complications in diseases of the ear, nose, paranasal sinuses, oral cavity, pharynx and larynx in adults b. diseases of the facial nerve and selected structures in the neck, c. rules of diagnostic and therapeutic procedures in case of ear, nose, throat and esophagus trauma. d. the rules of conduct in emergency situations in otorhinolaryngology, especially in laryngeal dyspnea, e. rules of diagnostic and therapeutic procedures in disorders of hearing, voice and speech, f. rules of diagnostic and therapeutic procedures in head and neck tumors.

Skills– Graduate* is able to:

F.U1	Assist with a typical surgery, prepare the surgical field and local anesthetize the operated area.
F.U2	Use basic surgical tools.
F.U3	Follow the rules of aseptic and antiseptic.
F.U4	Treat a simple wound, apply and change a sterile surgical dressing.

F.U9	Supply external bleeding.
E.U6	Perform indicative hearing and field of vision as well as otoscopic examination.
F.U25	Performs basic study ENT: ear, nose, throat and larynx.
F.U26	Student carries out whispered voice test to evaluate hearing in adults.

* In appendix to the Regulation of Minister of Science and Higher education from 26th of July 2019 „graduate”, not student is mentioned.

5. ADDITIONAL EFFECTS OF LEARNING (non-compulsory)	
Number of effect of learning	Effects in the fields of:
Knowledge – Graduate knows and understands:	
A.W1	Anatomical, histological and embryological terminology in English.
C.W26	Pathomorphological nomenclature.
D.W6	The importance of verbal and non-verbal communication in the process of communication with the patient and the concept of trust in interaction with the patient.
E.W1	Environmental and epidemiological conditions of the most common diseases.
E.W7	Causes, symptoms, principles of diagnosis and therapeutic procedure in relation to the most common internal diseases occurring in adults and their complications: 8) Allergic diseases, including anaphylaxis and anaphylactic shock, as well as angioedema
E.W23	Environmental and epidemiological conditions of the most common cancers.
E.W28	Principles of palliative care with a terminal patient.
Skills– Graduate is able to:	
D.U1	Take into account the patient's subjective needs and expectations arising from socio-cultural conditions in the therapeutic process.
D.U4	Build an atmosphere of trust during the diagnostic and treatment process.
E.U1	Conduct a medical interview with an adult patient
E.U7	Assess the general condition, the patient's state of consciousness and awareness.
E.U12	Perform differential diagnosis of the most common adult diseases.
E.U14	Recognize life threatening conditions.
E.U29	Perform basic medical procedures and procedures including: 1) Body temperature measurement (superficial and deep), heart rate measurement, non-invasive blood pressure measurement 2) Swabs for nose, throat and skin
E.U32	Plan specialist consultations

Social Competencies – Graduate is ready for:

SC1	The Graduate is able to establish and maintain deep and respectful contact with the patient.
SC2	The Graduate is guided by the good of the patient, putting them first.
SC3	The Graduate respects medical confidentiality and patient's rights.
SC4	The Graduate is aware of their own limitations and the ability to constantly improve their education.

6. CLASSES

Form of class	Class contents	Effects of Learning
Seminar	S1 (Seminar 1) - Epistaxis. S2 (Seminar 2) - Fractures of the ENT region. S3 (Seminar 3) – Carcinoma of oropharynx and oral cavity. S4 (Seminar 4) - Laryngeal and hypopharyngeal carcinoma. S5 (Seminar 5) - Carcinoma of nasopharynx. S6 (Seminar 6) Carcinoma of paranasal sinuses. S7 (Seminar 7) - Rhinosinusitis. S8 (Seminar 8) – Diagnosis and management of dizzy patient. S9 (seminar 9) - Rhinitis. S10 (Seminar 10) Facial nerve palsy. S11 (Seminar 11) Stridor. S12 (Seminar 12) Foreign bodies in the aerodigestive tract S 13 (Seminar 13) - Complications of inflammatory diseases in otolaryngology. S14 (Seminar 14) - Otitis externa. S15 (Seminar 15) Otitis media. Otagia. S16 (Seminar 16) - Hearing disorders. S17 (Seminar 17) - Neck masses. Salivary glands. S18 (Seminar 18) - Tonsils and adenoid - when is surgery indicated? Sleep apnea.	A.W1 C.W26 D.W6 E.W1 E.W7 E.W23 E.W28
Classes	C1-4 (classes 1-4) - ENT examination: oral cavity, anterior and posterior rhinoscopy, otoscopy, indirect laryngoscopy.- U25 C5 (classes 5) – Emergency room – U25 C6 (classes 6) – Operating room – U25 C7 (classes 7) – Labs – U26	D.U1 D.U4 E.U1 E.U7 E.U12 E.U14 E.U29 E.U32 SC1 SC2 SC3 SC4

7. LITERATURE
Obligatory

1. ENT secrets, edited by Bruce W. Jafek, Bruce W. Murrow. - 3rd ed., Philadelphia, PA : Elsevier-Mosby, - The Secrets series.
2. Cummings Otolaryngology - Head and Neck Surgery, 3-Volume Set: Expert Consult: Online and Print (Otolaryngology Cummings) 5th Edition.

Supplementary

1. Current diagnosis and treatment in otolaryngology: head and neck surgery, New York: McGraw-Hill, 2004, LANGE medical.
2. Essentials of otolaryngology / Eds.: Frank E. Lucente; Eds.: Gady Har-El., Wydanie 5th ed., Philadelphia : Lippincott Williams & Wilkins, 2004.

8. VERIFYING THE EFFECT OF LEARNING

Code of the course effect of learning	Ways of verifying the effect of learning	Completion criterion
All	Final test, report	2.0 (failed) 0-20 points 3.0 (satisfactory) 21-25 points 3.5 (rather good) 26-27 points 4.0 (good) 28-30 points 4.5 (more than good) 31-32 points 5.0 (very good) 33-35 points
U25	The correct execution of examinations on exercises.	
U26	The correct execution of examinations on exercises	

9. ADDITIONAL INFORMATION (*information essential for the course instructor that are not included in the other part of the course syllabus e.g. if the course is related to scientific research, detailed description of, information about the Science Club*)

It is mandatory to change shoes and have a white coat. Basic knowledge of head and neck anatomy is required, as well as entry knowledge for a specific seminar. There may be tests or pre-seminar checkups.

Medical confidentiality applies to students undergoing exercises at the Clinic (this applies to working at the patient's bed, in the operating theater, as well as all medical records of the patient).

Students are not allowed to provide information about the patient's condition, test results and the patient's treatment. All discussions about the patient (diagnosis, treatment, prognosis) may take place only without the patient's participation outside the patient's room, without the participation of other people.

It is strictly forbidden to take photos and record videos in any way showing patients, medical procedures or medical documentation.

Medical University of Warsaw has property rights, including copyright, to the syllabus. The syllabus may be used for educational purposes at the MUW only. Using of the syllabus for other purposes requires consent of the MUW.

ATTENTION

The final 10 minutes of the last class in the block/semester/year should be allocated to students' Survey of Evaluation of Classes and Academic Teachers.



PEDIATRIC OTOLARYNGOLOGY

1 IMPRINT

Academic Year	2023/2024
Department	Faculty of Medicine
Field of study	Medicine
Main scientific discipline	Medical sciences
Study Profile	General academic
Level of studies	<i>uniform MSc</i>
Form of studies	full time studies
Type of module / course	obligatory
Form of verification of learning outcomes	exam
Educational Unit / Educational Units	Department of Pediatric Otorhinolaryngology 02-091 Warsaw, Żwirki i Wigury 63A Phone: 48 22 31 79 721; e-mail: laryngologia.dsk@uckwum.pl
Head of Educational Unit / Heads of Educational Units	Lidia Zawadzka-Głos MD PhD lidia.zawadzka-glos@wum.edu.pl
Course coordinator	Piotr Kwast MD, pkwast@wum.edu.pl
Person responsible for syllabus	Piotr Kwast MD, pkwast@wum.edu.pl

Teachers	Elżbieta Niemczyk-Cieślak MD PhD Piotr Kwast MD Maciej Pilch MD Maria Wolniewicz MD Alicja Piotrowska MD Tomasz Lis MD
-----------------	---

2 BASIC INFORMATION

Year and semester of studies	4th year ; 7th semester	Number of ECTS credits	1.00
FORMS OF CLASSES		Number of hours	ECTS credits calculation
Contacting hours with academic teacher			
Lecture (L)			
Seminar (S)		6	0,25
Classes (C)		9	0,25
e-learning (e-L)			
Practical classes (PC)			
Work placement (WP)			
Unassisted student's work			
Preparation for classes and completions		20	0,5

3 COURSE OBJECTIVES

O1	Basic knowledge of head and neck pathology in children: causes, clinical course, treatment methods, complications and prognosis in diseases of the ears, nose and paranasal sinuses, mouth, throat and larynx.
O2	Ability of performing ENT examination in children and adolescents
O3	Ability to assess and act accordingly in acute states in pediatric ENT such a as trauma.
O5	Knowledge of care in a pediatric patient with a tracheostomy.

4 STANDARDS OF LEARNING – DETAILED DESCRIPTION OF EFFECTS OF LEARNING (concerns fields of study regulated by the Regulation of Minister of Science and Higher Education from 26 of July 2019; does not apply to other fields of study)

Code and number of effect of learning in accordance with standards of learning	Effects in the field of: <i>(in accordance with appendix to the Regulation of Minister of Science and Higher education from 26th of July 2019)</i>
---	---

Knowledge – Graduate* knows and understands:	
F.W1	Causes, symptoms, principles of diagnosis and therapeutic procedures available in the most common head and neck diseases in children
F.W3	Qualification rules for basic surgical procedures and invasive diagnostic and therapeutic procedures, rules for their performance and the most common complications in children
F.W10	Radiological symptomatology of basic otolaryngology diseases in children
F.W12	Issues in the field of pediatric ENT including causes, clinical course and outcome, treatment, prognosis and complications in the most common diseases of the ear, nose, paranasal sinuses, oral cavity, pharynx and larynx in children and rules of conduct in acute states in pediatric otorhinolaryngology.

Skills– Graduate* is able to:

F.U1	Assist with a typical surgery, prepare the surgical field and local anesthetize the operated area.
F.U2	Use basic surgical tools.
F.U3	Follow the rules of aseptic and antiseptic.
F.U4	Treat a simple wound, apply and change a sterile surgical dressing.
F.U9	Supply external bleeding.
E.U6	Perform indicative hearing and field of vision as well as otoscopic examination.
F.U25	Performs basic study ENT: ear, nose, throat and larynx.
F.U26	Student carries out whispered voice test to evaluate hearing in children.

* In appendix to the Regulation of Minister of Science and Higher education from 26th of July 2019 „graduate”, not student is mentioned.

5 ADDITIONAL EFFECTS OF LEARNING (non-compulsory)

Number of effect of learning	Effects in the fields of:
-------------------------------------	----------------------------------

Knowledge – Graduate knows and understands:

A.W1	Anatomical, histological and embryological terminology in English.
C.W26	Pathomorphological nomenclature.
D.W6	The importance of verbal and non-verbal communication in the process of communication with the patient and the concept of trust in interaction with the patient.
E.W1	Environmental and epidemiological conditions of the most common diseases.

Skills– Graduate is able to:

D.U1	Take into account the patient's subjective needs and expectations arising from socio-cultural conditions in the therapeutic process.
D.U4	Build an atmosphere of trust during the diagnostic and treatment process.

E.U1	Conduct a medical interview with an adult patient.
E.U7	Assess the general condition, the patient's state of consciousness and awareness.
E.U12	Perform differential diagnosis of the most common children's diseases.
E.U14	Recognize life threatening conditions.
E.U32	Plan specialist consultations.

Social Competencies – Graduate is ready for:

SC1	The student is able to establish and maintain deep and respectful contact with the patient.
SC2	The student is guided by the good of the patient, putting them first.
SC3	The student respects medical confidentiality and patient's rights.
SC4	The student is aware of their own limitations and the ability to constantly improve their education.

6 CLASSES

Form of class	Class contents	Effects of Learning
Seminar	<p>S1-Seminar 1 – Pharynx. Hypertrophy of tonsils and adenoids. Infectious diseases of the pharynx. Immunologic aspects of upper respiratory system diseases.</p> <p>S2-Seminar 2- Nose and sinuses. Rhinitis. Rhinosinusitis in children: complications, surgical treatment - FESS. Nasal trauma. Choanal atresia.</p> <p>S3-Seminar 3- Ear. External otitis. Otitis media. Complication of otitis media. Audiology: conductive and sensorineural hearing loss – differentiation, diagnostic, causes. Hearing screening of newborns.</p> <p>S4-Seminar 4- Larynx and airways: airway obstruction, epistaxis, foreign bodies in the ear, respiratory tract and oesophagus. Larynx and trachea: congenital anomalies, inflammatory diseases.</p>	
Classes	C1-3 (Practical classes 1-3) - ENT examination: oral cavity, anterior rhinoscopy, otoscopy. Patient cases review and discussion. Operating room and endoscopy.	

7 LITERATURE

Obligatory

- 1 Paediatric Otorhinolaryngology, (ed.) Chmielik M.: Medical University of Warsaw, 2010

Supplementary

- 1 Paediatric Otolaryngology. (ed.) Ch.D. Bluestone. Saunders Elsevier-Science (USA), 2003.

8 VERIFYING THE EFFECT OF LEARNING

Code of the course effect of learning	Ways of verifying the effect of learning	Completion criterion	
All	Final test, conducted together with the Department of Otolaryngology, Head and Neck Surgery.	2.0 (failed)	0-20 points
		3.0 (satisfactory)	21-25 points
		3.5 (rather good)	26-27 points
		4.0 (good)	28-30 points
		4.5 (more than good)	31-32 points
		5.0 (very good)	33-35 points
All	Completion of the e-learning course		

9 ADDITIONAL INFORMATION *(information essential for the course instructor that are not included in the other part of the course syllabus e.g. if the course is related to scientific research, detailed description of, information about the Science Club)*

Classes take place during the first week of the Otolaryngology course on Monday, Tuesday and Wednesday. Students are asked to arrive at 8:30 to the Department's seminar room in the Pediatric Hospital (DSK UCK WUM, Żwirki i Wigury 63A) in the department 4H (4th floor) after changing in the student's cloakroom downstairs. It is mandatory to change shoes.

It is mandatory for all students to wear an ID badge during classes.

Any planned absence during the course must be reported beforehand and each absent day must be taken with another group during the same semester. In case of additional problems please refer to the Department's secretary's office:
laryngologia.dsk@uckwum.pl

The e-learning course is opened on the University's e-learning platform (e-learning.wum.edu.pl/en) for all groups at the beginning of the semester and must be finished by all students before the faculty meeting preceding the final exam. It is a good idea to complete the e-learning course before or during the Otolaryngology course.

Basic knowledge of head and neck anatomy is required.

Medical confidentiality applies to students undergoing exercises at the Clinic (this applies to working at the patient's bed, in the operating theater, as well as all medical records of the patient). Students are not allowed to provide information about the patient's condition, test results and the patient's treatment.

All discussions about the patient (diagnosis, treatment, prognosis) may take place only without the patient's participation outside the patient's room, without the participation of other people.

It is strictly forbidden to take photos and record videos during classes and especially in any way showing patients, medical procedures or medical documentation.

Please note, that practical classes may be partially or completely conducted remotely, according to the University's current official regulations.

Medical University of Warsaw has property rights, including copyright, to the syllabus. The syllabus may be used for educational purposes at the MUW only. Using of the syllabus for other purposes requires consent of the MUW.

ATTENTION

The final 10 minutes of the last class in the block/semester/year should be allocated to students' Survey of Evaluation of Classes and Academic Teachers.



Clinical pharmacology

1. IMPRINT

Academic Year	2023/2024
Department	Faculty of Medicine
Field of study	Medicine
Main scientific discipline	Medical sciences
Study Profile	general academic
Level of studies	uniform MSc
Form of studies	Full time studies
Type of module / course	obligatory
Form of verification of learning outcomes	exam
Educational Unit / Educational Units	Chair and Department of Experimental and Clinical Pharmacology Centre for Preclinical Research and Technology CePT, Banacha 1b, 02-927 Warsaw, tel. (+48) 022 1166160
Head of Educational Unit / Heads of Educational Units	Prof. Dagmara Mirowska-Guzel MD, PhD, SciD tel. (+48) 022 1166160
Course coordinator	Maciej Niewada MD, PhD, SciD tel. (+48) 691745377
Person responsible for syllabus	Maciej Niewada MD, PhD, SciD tel. (+48) 691745377
Teachers	Ewa Widy-Tyszkiewicz MD, PhD, SciD Aleksandra Wiśłowska-Stanek MD, PhD, SciD Iwona Korzeniewska-Rybicka MD, PhD Jan Bembenek MD, PhD Ceren Postuła MSc, PhD Justyna Pyrzanowska MD, PhD

	Maciej Niewada MD, PhD, SciD Wojciech Masełbas MD, PhD
--	---

2. BASIC INFORMATION

Year and semester of studies	IV year 7 semester	Number of ECTS credits	5.00
FORMS OF CLASSES	Number of hours	ECTS credits calculation	
Contacting hours with academic teacher			
Lecture (L)	15	1	
Seminar (S)	15	1	
Discussions (D)	20	1	
e-learning (e-L)			
Practical classes (PC)			
Work placement (WP)			
Unassisted student's work			
Preparation for classes and completions	50	2	

3. COURSE OBJECTIVES

O1	Acquisition of facts, concepts and principles of rational pharmacotherapy in clinical practice.
O2	Understanding the basic benefits, dangers and difficulties associated with drug use.

4. STANDARDS OF LEARNING – DETAILED DESCRIPTION OF EFFECTS OF LEARNING

Code and number of the effect of learning in accordance with standards of learning	Effects in the field of: <i>(in accordance with appendix to the Regulation of Minister of Science and Higher education from 26th of July 2019)</i>
--	--

Knowledge – Graduate* knows and understands:

G.K1	E.W3. causes, symptoms, principles of diagnosis and therapeutic management for the most common diseases of children E.W6. the most common life-threatening conditions in children and rules of conduct in these states; E.W7. treatment procedures of the most frequent internal diseases and their complications in adult patients: 1) circulatory system diseases, including coronary heart disease, heart defects, endocardium disease, cardiomyopathy, pericardium diseases, cardiac failure (acute and chronic), artery and vein diseases, hypertension: essential and secondary, pulmonary hypertension,
------	---

- 2) respiratory system diseases, including respiratory tract diseases, chronic obstructive pulmonary disease, bronchial asthma, bronchiectasis, cystic fibrosis, respiratory system infections, interstitial lung diseases, pleural diseases, mediastinal disorders, obstructive and central sleep apnoea, respiratory failure (acute and chronic), respiratory system cancers,
 - 3) digestive system diseases, including oral cavity, oesophagus, stomach and duodenum, intestine, pancreas, liver, bile duct and gall bladder diseases,
 - 4) endocrine system diseases, including hypothalamus and pituitary gland, thyroid, parathyroid glands, the cortex and medulla of adrenal glands, ovaries, testicles disease, as well as neuroendocrine tumours, polyendocrine syndromes, different types of diabetes and metabolic syndrome: hypoglycaemia, obesity, dyslipidaemia,
 - 5) renal and urinary tract diseases, including acute and chronic renal failure, glomerulus and interstitial renal diseases, renal cysts, nephrolithiasis, urinary system infections, urinary system cancers, including bladder tumour and kidney cancer,
 - 6) haematological system diseases, including marrow aplasia, anaemia, granulocytopenia and agranulocytosis, thrombocytopenia, acute leukaemia, myeloproliferative, myelodysplastic and myeloproliferative cancers, myelodysplastic syndromes, mature B and T lymphocyte cancers, haemorrhagic diathesis, thrombosis, states of direct threat to life in haematology, blood disorders in other organ diseases,
 - 7) rheumatic diseases, including systemic diseases of connective tissue, systemic vasculitis, arthritis with the involvement of the spine, bone metabolic diseases, in particular osteoporosis and osteoarthritis, gout,
 - 8) allergic diseases, including anaphylaxis and anaphylactic shock and angioedema,
 - 9) water-electrolytic disturbances and acid-base disturbances, dehydration, hyperhydration, electrolyte imbalance, acidosis and alkalosis;
- E.W10. basic principles of pharmacotherapy of diseases of the elderly;
- E.W14 therapeutic treatment in the most common diseases of the nervous system, including:
- 1) headaches: migraine, tension headache and headache syndrome and nerve V neuralgia,
 - 2) cerebrovascular diseases, in particular cerebral infarction,
 - 3) epilepsy,
 - 4) infections of the nervous system, in particular meningitis, Lyme disease, herpetic encephalitis, neurotransmission diseases,
 - 5) dementia, in particular Alzheimer's disease, frontal dementia, vascular dementia and other dementia syndromes,
 - 6) diseases of the basal ganglia, in particular Parkinson's disease,
 - 7) demyelinating diseases, in particular multiple sclerosis,
 - 8) diseases of the neuromuscular system, in particular amyotrophic lateral sclerosis and sciatica,
 - 9) cranial-cerebral injuries, in particular concussion;
- E.W17. therapeutic treatment of the most common mental illnesses, including:
- 1) schizophrenia,
 - 2) affective disorders,
 - 3) neurotic and adaptive disorders,
 - 4) eating disorders,
 - 5) disorders associated with the use of psychoactive substances;
 - 6) sleeping disorders;
- E.W18. principles of diagnostics and emergency procedures in psychiatry, including the problem of suicides;
- E.W19. the specificity of mental disorders and their treatment in children, adolescents and in the period old age;
- E.W25. possibilities of modern cancer therapy, including therapy multimodal, the prospects of cell and gene therapies and their undesirable effects;
- E.W26. principles of combination therapies in oncology, algorithms for diagnostic and -medicine in the most common neoplasms;
- E.W27. principles of therapeutic management of the most common problems palliative medicine, including:
- 1) symptomatic treatment of the most common somatic symptoms,
 - 2) the most frequent emergencies in palliative medicine;
- E.W29. principles of pain management, including cancer and chronic pain;
- E.W34. causes, symptoms, principles of diagnosis and therapeutic management and prophylactic in the most common bacterial and viral diseases, parasitic and mycoses, including pneumococcal and viral infections hepatitis, acquired immune deficiency syndrome (AIDS), sepsis and nosocomial infections;
- E.W36. causes, symptoms, principles of diagnosis and therapeutic management in the most common sexually transmitted diseases;
- E.W37. causes, symptoms, principles of diagnosis and therapeutic management in the most common hereditary diseases;

	<p>E.W38. causes, symptoms, principles of diagnosis and therapeutic management in the most common diseases and specific problems in the practice of the doctor family life;</p> <p>E.W42. indications for the implementation of monitored therapy;</p> <p>E.W43. basic pharmacoeconomic concepts;</p> <p>G.W8. legal regulations and basic methods regarding the medical experiment and conducting other medical research, including basic methods of data analysis;</p> <p>G.W10. basic regulations in the field of pharmaceutical law;</p>
--	--

Skills– Graduate* is able to:

G.S1	<p>E.U15. recognize the condition after consuming alcohol, drugs and other stimulants;</p> <p>E.U16. plan diagnostic, therapeutic and prophylactic procedures;</p> <p>E.U17. analyze possible side effects of individual drugs and their interactions;</p> <p>E.U18. propose individualisation of current therapeutic guidelines and others methods of treatment in the face of ineffectiveness or contraindications to therapy standard;</p> <p>E.U19. recognize the symptoms of drug dependence and propose treatment measures;</p> <p>E.U31. interpret pharmaceutical characteristics of medicinal products and critically evaluate advertising material about drugs</p> <p>E.U33. implement basic treatment procedures in acute poisonings;</p> <p>E.U34. monitor the condition of a patient poisoned with chemicals or drugs;</p>
------	--

* In appendix to the Regulation of Minister of Science and Higher education from 26th of July 2019 „graduate”, not student is mentioned.

5. ADDITIONAL EFFECTS OF LEARNING (non-compulsory)

Number of effect of learning	Effects in the fields of:
------------------------------	---------------------------

Knowledge – Graduate knows and understands:

K1	
----	--

Skills– Graduate is able to:

S1	
----	--

Social Competencies – Graduate is ready for:

SC1	
-----	--

6. CLASSES

Form of class	Class contents	Effects of Learning
Seminars and practical classes:	<ol style="list-style-type: none"> 1. Clinical trials and drug development. Good clinical practice. On label and off label use of drugs. 2. Therapy of asthma and chronic obstructive pulmonary disease 3. Psychoses and behavioral emergencies treatment. Headaches. 4. Therapy of mood disorders 5. Ischaemic heart disease treatment; VTE/PE prevention and treatment. 6. Hypertension and heart failure treatment guidelines. 7. Chemotherapy of microbial diseases – rationale, guidelines and every day practice. 8. Pharmacology of GI disorders – peptic ulcer, GERD, IBDs, pancreatitis and liver cirrhosis. 	<p>EW3-EW43</p> <p>GW8, GW10</p> <p>EU15- EU34</p>

	9. Herbal treatment. Food supplements. 10. Pharmacology of emergencies and acute states. 11. Clinical pharmacology of neurological disorders (stroke, epilepsy, and migraine treatment) 12. Analgesics and the control of pain Endocrine system and metabolic disorders treatment	
Lectures	1. Pharmacoeconomics and outcomes research. Health technology assessment – focus on drugs. 2. Biotechnological drugs 3. Pharmacovigilance. 4. Pharmacogenomics. 5. Clinical pharmacology of cardiovascular drugs – Cardiovascular risk control. 6. Cardiac arrhythmias treatment 7. Skin disorders treatment 8. Therapy of poisoned patient 9. Therapeutic drug monitoring. 10. Special aspects of geriatric pharmacology 11. Prenatal and pediatric pharmacology 12. Individual variation and drug interactions 13. Movement disorders and degenerative CNS diseases.	EW3-EW43 GW8, GW10 EU15-EU34

7. LITERATURE

Obligatory

1. Humphrey P. Rang, James M. Ritter, Rod J. Flower, Graeme Henderson. Rang & Dale's Pharmacology, 9th Edition. 2018.
2. Bertram G. Katzung. Basic and Clinical Pharmacology 15th Edition. 2020.
3. Katzung & Trevor's Pharmacology Examination and Board Review, Mcgraw Hill Education & Medic, 13th Edition, 2021.
4. Goodman and Gilman's The Pharmacological Basis of Therapeutics. Laurence Brunton, Bjorn Knollman, Randa Hilal-Dandan, McGraw-Hill Education, 13th Edition. 2017.

Supplementary

1. Paweł Krzączek, Przemysław Mikołajczak. Pharmacology in a nutshell. 2017. 1st Edition. ISBN: 978-83-941043-2-0
2. Lippincott Illustrated Reviews: Pharmacology, 7th edition, Karen Whalen PharmD, BCPS, Publication Date October 2, 2018
3. BRS Pharmacology, Author(s): Sarah Lerchenfeldt, Gary Rosenfeld Ph.D., 7th edition, publication date: August 12, 2019
4. Guidelines of medical societies: www.guidelines.gov and regulatory agencies: ema.europa.eu; fda.gov

8. VERIFYING THE EFFECT OF LEARNING

Code of the course effect of learning	Ways of verifying the effect of learning	Completion criterion
EW3-EW43 GW8, GW10 EU15-EU34	Attendance Multiple choice test or oral exam	>50% <i>Grade and criteria:</i> 2,0 (unsatisfactory) <=50% 3,0 (satisfactory) 51-58% 3,5 (better than satisfactory) 59-68% 4,0 (good) 69-78% 4,5 (better than good) 79-88% 5,0 (very good) >=89%

9. ADDITIONAL INFORMATION

Students are communicated and updated via e-learning platform: e-learning.wum.edu.pl/en

Students are obliged to attend all practical classes and seminars with the group assigned only (individual arrangements are to be approved in written (mail) in advance).

On completion of the course students take final exam covering 3 semesters (both pharmacology and toxicology and clinical pharmacology). To be qualified for the exam both colloquiums at the end of each semester of pharmacology and toxicology need to be successfully passed.

Erasmus students who would like to take clinical pharmacology only are having exam limited to the scope of clinical pharmacology and only if they reported pharmacology and toxicology training in their home university.

Rules on final exam Q&A tests:

1. *Students are informed about the date/time and the venue for Q&A tests either for semester colloquium or final exam at least one month in advance.*
2. *Students are expected to arrive at the venue at least 15 minutes before test start. Those who are late more than 15 minutes after the test start are not allowed to enter and are kindly invited for the retake.*
3. *To facilitate students identification ID document (preferably student record book) need to be presented, otherwise student are not allowed to take the test.*
4. *Students are asked to wait outside the room and can enter only following identification confirmed.*
5. *Students are allocated the individual place which is pointed by supervisor.*
6. ***The test is based on student individual work - unauthorized materials (including revision notes) and mobile phones are disallowed. Communication with any person during the exam, other than the supervisor, is prohibited and can be the cause for student banning.***
7. *For Q&A tests only one answer is correct.*
8. *To pass the test students need to provide 50% + 1 (i.e. 51 for 100 questions) correct answers. The final individual score is based on the number of correct answers provided and other students' performance (the distribution of test results).*
9. *The form and the time of retake is individually decided with the teacher.*
10. *Test results are made available on the Department website as soon as possible.*

Medical University of Warsaw has property rights, including copyright, to the syllabus. The syllabus may be used for educational purposes at the MUW only. Using of the syllabus for other purposes requires consent of the MUW.

ATTENTION

The final 10 minutes of the last class in the block/semester/year should be allocated to students' Survey of Evaluation of Classes and Academic Teachers.



Pediatric radiology

1. IMPRINT

Academic Year	2023/2024
Department	Faculty of Medicine
Field of study	Medicine
Main scientific discipline	Medical science
Study Profile	General academic
Level of studies	Uniform MSc
Form of studies	Full time studies
Type of module / course	Obligatory
Form of verification of learning outcomes	Credit
Educational Unit / Educational Units	DEPARTMENT OF PEDIATRIC RADIOLOGY (2MD/ WLS18) 63a Żwirki I Wigury St., 02-091 Warsaw tel. 22 317 92 81, e-mail: radiologia.dsk@uckwum.pl
Head of Educational Unit / Heads of Educational Units	Mariusz Furmanek MD PhD
Course coordinator	Dominik Nguyen, MD PhD, e-mail: dominik.nguyen@wum.edu.pl

Person responsible for syllabus	Dominik Nguyen, MD PhD, e-mail: dominik.nguyen@wum.edu.pl
Teachers	Mariusz Furmanek , MD, PhD Remigiusz Krysiak, MD Dominik Nguyen, MD Ayad Al-Janabi, MD

2. BASIC INFORMATION			
Year and semester of studies	IV year, 7 & 8 semester	Number of ECTS credits	2.00
FORMS OF CLASSES		Number of hours	ECTS credits calculation
Contacting hours with academic teacher			
Lecture (L)			
Seminar (S)		18	2.0
Classes (C)			
e-learning (e-L)			
Practical classes (PC)			
Work placement (WP)			
Unassisted student's work			
Preparation for classes and completions			

3. COURSE OBJECTIVES	
O1	The course program offers to students the basic information connected with: 1. practical algorithms in diagnostic imaging in pediatrics,
O2	2. assessment of several diagnostic imaging modalities (X-ray, ultrasound, computed tomography, magnetic resonance) applied to the most common clinical conditions in pediatrics.
O3	

4. STANDARDS OF LEARNING – DETAILED DESCRIPTION OF EFFECTS OF LEARNING (concerns fields of study regulated by the Regulation of Minister of Science and Higher Education from 26 of July 2019; does not apply to other fields of study)	
Code and number of effect of learning in accordance with standards of learning	Effects in the field of: <i>(in accordance with appendix to the Regulation of Minister of Science and Higher education from 26th of July 2019)</i>

Knowledge – Graduate* knows and understands:

G.K1/ F.W10	problems of contemporary imaging studies, in particular: <ol style="list-style-type: none"> 1) radiological symptomatology of basic diseases, 2) Instrumental methods and imaging techniques used to perform therapeutic procedures, 3) indications, contraindications and preparation of patients for particular types of imaging examinations and contraindications to the use of contrast agents;
G.K2	

Skills– Graduate* is able to:

G.S1/ A.U4	correlate the relationships between the anatomical structures on the basis of in vivo diagnostic studies, especially medical imaging (X-ray, contrast-enhanced studies, computed tomography, magnetic resonance imaging)
G.S2/ F.U7	assess the result of radiographic studies in terms of the most frequent kinds of fractures, especially long bone fractures;

* In appendix to the Regulation of Minister of Science and Higher education from 26th of July 2019 „graduate”, not student is mentioned.

5. ADDITIONAL EFFECTS OF LEARNING (non-compulsory)

Number of effect of learning	Effects in the fields of:
------------------------------	---------------------------

Knowledge – Graduate knows and understands:

F.W1: 1, 2, 3, 4.	causes, symptoms, principles of diagnosis and therapeutic treatment in relation to the most common diseases requiring surgical intervention taking into account the distinctions of childhood, in particular: <ol style="list-style-type: none"> 1) acute and chronic diseases of abdominal cavity, 2) chest diseases, 3) limb and head diseases, 4) bone fractures and organ injuries;
B.W8	physical bases of non-invasive imaging techniques;
E.W3: 2, 3, 4, 5, 6, 9	causes, symptoms, principles of diagnosis and therapeutic treatment of the most common diseases in children: <ol style="list-style-type: none"> 2) heart defects, myocarditis, endocarditis and pericarditis, cardiomyopathy, abnormal heart rhythm, cardiac failure, hypertension, syncope, 3) acute and chronic diseases of the upper and lower respiratory tract, congenital defects of the respiratory tract, tuberculosis, cystic fibrosis, asthma, allergic rhinitis, urticaria, anaphylactic shock, angioedema, 4) anaemia, bleeding diatheses, marrow failure, cancers in children, including solid tumours typical of childhood, 5) acute and chronic abdomen pain, vomiting, diarrhoea, constipations, alimentary canal bleedings, peptic ulcer disease, non-specific intestine diseases, pancreas diseases, cholestasis and liver diseases and other acquired diseases and congenial defects of the alimentary canal, 6) urinary system infections, congenial defects of the urinary system, nephrotic syndrome, nephrolithiasis, acute and chronic renal failure, acute and chronic renal inflammations, systemic renal diseases, urination disorders, vesicoureteral reflux, 9) the most frequent infectious diseases in childhood,
E.W6	the most common life threatening conditions in children and the management of these conditions

Skills– Graduate is able to:

B.U1	apply physical phenomena to explain the effects of external factors, such as temperature, acceleration, pressure, electromagnetic field and ionising radiation on the human organism and its components;
------	--

B.U2	assess the health effects of absorption of a given dose of ionising radiation and observe the radiation protection rules
E.U12	perform the differential diagnosis of the most common diseases in adults and children
E.U16	plan diagnostic, therapeutic and preventive treatment

Social Competencies – Graduate is ready for:

SC1	
-----	--

6. CLASSES

Form of class	Class contents	Effects of Learning
Seminars:	<ol style="list-style-type: none"> 1. K1, S1 - Diagnostic imaging in respiratory tract diseases in children – Remigiusz Krysiak, MD 2. K1, S1 - Diagnostic imaging and interventional procedures in children with congenital heart diseases – Remigiusz Krysiak, MD 3. K1, S1 - Diagnostic imaging in urinary tract diseases in children – Ayad Al-Janabi, MD 4. K1, S1 - Diagnostic imaging in gastrointestinal tract diseases in children – Dominik Nguyen, MD. 	

7. LITERATURE

Obligatory

1. H.E. Daldrup-Link: Essentials of Pediatric Radiology: A Multimodality Approach. Cambridge Medicine

Supplementary

1. J.O. Haller, T.L. Slovis: Pediatric Radiology. Springer, II nd ed.

8. VERIFYING THE EFFECT OF LEARNING

Code of the course effect of learning	Ways of verifying the effect of learning	Completion criterion
e.g. G.K1, G.S1, K1	<i>This field defines the methods used for grading students e.g. pop quiz, test, written report etc.</i>	<i>e.g. threshold number of points</i>
	Multiple choice question test (MCQ)	50% of correct answers
	Attendance reports from classes / participation in online activities	In order to complete the course with a positive score, the students have to attend and/or view all classes and materials provided.

9. ADDITIONAL INFORMATION (information essential for the course instructor that are not included in the other part of the course syllabus e.g. if the course is related to scientific research, detailed description of, information about the Science Club)

The course takes place from Wednesday to Friday according to the semester plan. Seminars start at 8.30 and last until 1pm if not otherwise stated.

Classes are stationary, unless changes are announced during the semester depending on the pandemic situation – **possible changes include hybrid teaching and/or e-learning performed both either Microsoft Teams or e-learning platform.**

Stationary classes take place in room 106 in Library Center (group 2 - winter) and the main Rectorate building, room 602 (groups: 1, 3, 4 - spring), if not otherwise announced.

Stationary and/or online live classes are completed via attendance. E-learning course participation will be verified via a test.

Medical University of Warsaw has property rights, including copyright, to the syllabus. The syllabus may be used for educational purposes at the MUW only. Using of the syllabus for other purposes requires consent of the MUW.

ATTENTION

The final 10 minutes of the last class in the block/semester/year should be allocated to students' Survey of Evaluation of Classes and Academic Teachers.



Surgery

1. IMPRINT

Academic Year	2023/2024
Department	Faculty of Medicine
Field of study	Medicine
Main scientific discipline	Medical science
Study Profile	General academic
Level of studies	Uniform MSc
Form of studies	Full time studies
Type of module / course	Obligatory
Form of verification of learning outcomes	Credit
Educational Unit / Educational Units	Department of General, Transplant and Liver Surgery, Medical University of Warsaw (1WB1) 1a Banacha St., 02-097 Warsaw tel. 22 599 25 45, e-mail: hepaclin@wum.edu.pl
Head of Educational Unit / Heads of Educational Units	prof. dr hab. Michał Grąt
Course coordinator	Ass. Prof. Oskar Kornasiewicz MD., PhD. Michał Skalski MD, PhD e-mail: oskar.kornasiewicz@wum.edu.pl , mskalski@wum.edu.pl

Person responsible for syllabus	Ass. Prof. Oskar Kornasiewicz MD., PhD. Michał Skalski MD, PhD e-mail: oskar.kornasiewicz@wum.edu.pl , mskalski@wum.edu.pl
Teachers	Prof. Krzysztof Zieniewicz, MD., PhD., Prof. of Surgery Prof. Michał Grąt, MD., PhD., Prof. of Surgery Prof. Rafał Paluszkiwicz, MD., PhD., Prof. of Surgery Prof. Waldemar Patkowski, MD., PhD., Prof. of Surgery Prof. Tadeusz Wróblewski, MD., PhD., Prof. of Surgery Prof. Marek Krawczyk, MD. PhD., Prof. of Surgery Ass. Prof. Krzysztof Dudek, MD., PhD. Ass. Prof. Oskar Kornasiewicz MD., PhD. Dr. Wojciech Figiel, MD., PhD Dr. Mariusz Grodzicki, MD., PhD. Dr. Piotr Kalinowski, MD., PhD. Dr. Marcin Kotulski, MD., PhD. Dr. Maciej Krasnodębski, MD., PhD. Dr. Michał Skalski, MD., PhD. Dr. Piotr Smoter, MD., PhD. Dr. Ireneusz Grzelak, MD., PhD. Dr. Wacław Hołowko, MD. Dr. Marcin Morawski, MD Dr. Jan Stypułkowski, MD. Dr. Sławomir Kozieł, MD. Dr. Joanna Ligocka, MD. Dr. Łukasz Nazarewski, MD. Dr. Marta Przybysz, MD. Dr. Rafał Stankiewicz, MD.

2. BASIC INFORMATION			
Year and semester of studies	IV year, 8 semester	Number of ECTS credits	8.00
FORMS OF CLASSES		Number of hours	ECTS credits calculation
Contacting hours with academic teacher			
Lecture (L)		10	0,3
Seminar (S)		30	2,8
Classes (C)		70	3,6
e-learning (e-L)			
Practical classes (PC)			
Work placement (WP)			
Unassisted student's work			
Preparation for classes and completions		40	1,3

3. COURSE OBJECTIVES	
O1	Knowledge of surgical techniques used in treatment of surgical diseases and general surgical practice as: gastrointestinal bleeding, bowel obstruction, pre and post-operative management of patient and complications, acute abdominal pain, hepatobiliary diseases, colorectal cancer, abdominal hernias, pancreatic diseases, trauma, burns and shock, fluid, electrolytes and nutrition, vascular diseases
O2	Skills: medical history taking and physical examination of patients with surgical diseases, surgical wound management (surgical sutures) and dressing, basic interpretation of imaging diagnostics such as computed tomography, magnetic resonance imaging, cholangiography, observing and/or assisting during surgery in the operating theater.
O3	<p>Multiorgan injuries – epidemiology, pathophysiology of the shock, pre-hospital treatment, diagnostic (trauma scan, FAST), surgical and conservative treatment</p> <p>Endocrine surgery - common causes and types of endocrine disorder, standard diagnostic, laboratory and radiographic studies, complications associated with endocrine diseases with operative therapy, life-saving therapies, other operative and treatments available for endocrine disease</p> <p>Acute vascular disease – selected group of patients, diagnostic (Angio-CT), surgical and endovascular procedures</p> <p>GEP/NET of GI Tract – epidemiology, diagnostic and treatment of neuroendocrine tumors</p> <p>Surgical care in the Outpatient clinic – ambulatory follow up after surgical procedures, “one-day” surgery procedures</p> <p>Evolution of surgical approach and treatment of gastric and duodenal ulcers – epidemiology, pathophysiology, methods of: pharmacological, endoscopic and surgical treatment</p> <p>Phlegmon, abscess, sebaceous cyst, – surgical management & treatment, surgical drainage</p> <p>Robotic surgery - modern methods of low-invasive surgery</p> <p>Endoscopic treatment of biliary tract disease - treatment of benign or malignant disease of biliary tract (ERCP, PTC)</p> <p>Endoscopic treatment of GI bleeding - treatment of patients with bleeding from ulcers, esophageal varices</p> <p>Acute kidney injury Acute liver failure - pathophysiology, conservative treatment, hemodialysis</p> <p>Diabetic foot - diabetic neuropathy, risk factors, surgical drainage, amputation</p> <p>Endometriosis – multidisciplinary problem - epidemiology, differential diagnostic, hormonotherapy, surgical treatment, complications</p> <p>Dysphagia; surgery of the esophagus – cancer, chemical burns, surgical and endoscopic treatment</p> <p>Gastric cancer – epidemiology, early gastric cancer, endoscopy for diagnostic and treatment, gastrectomy</p> <p>Malignancies of the gallbladder and biliary tract - epidemiology, symptoms, palliative treatment, surgical treatment</p> <p>Abdominal hernias – anatomy, laparoscopic vs open hernioplasty</p> <p>Laparoscopic surgery - overview of mini-invasive methods of surgical treatment</p> <p>GERD – epidemiology, symptoms, laparoscopic fundoplication, pH-metry</p> <p>ERAS protocol in surgery – application of protocol of early recovery of surgical patients</p> <p>Risk factors and complications in surgery – ‘high-risk’ patient, minor and major post-operative complications</p> <p>Intraoperative ultrasound examination – detection of tumors in the liver, navigation for RFA, IRE procedures</p> <p>Colorectal surgery – epidemiology, symptoms, risk factors, method of endoscopic and surgical treatment, radiotherapy</p> <p>Pancreatic diseases - acute and chronic pancreatitis, cancer, progress in treatment</p> <p>Obesity surgery - indication, overview of bariatric procedures, laparoscopic operation for morbid obesity (video)</p> <p>Iatrogenic bile duct injuries – epidemiology, early and latent symptoms, endoscopic treatment, surgical management of patient</p> <p>Liver resections - anatomy of the liver, method of liver parenchyma dissection, postoperative complications</p> <p>Progress in palliative treatment of liver tumors - irreversible electroporation (IRE), radiofrequency/ microwave ablation (RFA/ MVA)</p> <p>Liver procurement from deceased donors – discussing the technical features of preparing the liver for transplantation</p> <p>Liver transplantation from deceased donor – qualification criteria, indications, technical features</p> <p>Surgical ICU – management of patients after major surgical procedures and liver transplantation</p> <p>Ascites-diagnosis and treatment – pathophysiology, paracentesis – when to apply?</p> <p>Follow up after liver transplantation – management of patient after liver transplantation in hepatology department and in ambulatory service</p>
4. STANDARDS OF LEARNING – DETAILED DESCRIPTION OF EFFECTS OF LEARNING (concerns fields of study regulated by the Regulation of Minister of Science and Higher Education from 26 of July 2019; does not apply to other fields of study)	

Code and number of effect of learning in accordance with standards of learning	Effects in the field of: <i>(in accordance with appendix to the Regulation of Minister of Science and Higher education from 26th of July 2019)</i>
---	---

Knowledge – Graduate* knows and understands:

G.K1/ E.W7	reasons, symptoms, diagnostic and treatment procedures of the most frequent internal diseases and their complications in adult patients:
G.K2	

Skills– Graduate* is able to:

G.S1/ E.U1	collect medical history from adult patients;
G.S2/ E.U3	conduct a complete and targeted physical examination in adults;
G.S3/ E.U12	perform the differential diagnosis of the most common diseases in adults and children
G.S4/ E.U13	assess and describe the patient's somatic and psychological states;
G.S5/ E.U16	plan diagnostic, therapeutic and preventive treatment;

* In appendix to the Regulation of Minister of Science and Higher education from 26th of July 2019 „graduate”, not student is mentioned.

5. ADDITIONAL EFFECTS OF LEARNING (non-compulsory)

Number of effect of learning	Effects in the fields of:
-------------------------------------	----------------------------------

Knowledge – Graduate knows and understands:

--	--

Skills– Graduate is able to:

--	--

Social Competencies – Graduate is ready for:

SC1	
-----	--

6. CLASSES

Form of class	Class contents	Effects of Learning
Lectures: Seminars: Classes:	<ol style="list-style-type: none"> 1. Multiorgan injuries (K1, S1, C1) 2. Endocrine surgery (K1, S1, C1) 3. Acute vascular disease (K1, S1, C1) 4. Liver resections (video) (K1, S1, C1) 5. Progress in palliative treatment of liver tumors (K1, S1, C1) 6. GEP/NET of GI Tract (K1, S1, C1) 	

	<ol style="list-style-type: none"> 7. Surgical care in the Outpatient clinic (K1, S1, C1) 8. Evolution of surgical approach and treatment of gastric and duodenal ulcers (K1, S1, C1) 9. Phlegmon, abscess, sebaceous cyst, – surgical management & treatment(K1, S1, C1) 10. Robotic surgery (K1, S1, C1) 11. Laparoscopic vs open appendectomy (video) (K1, S1, C1) 12. Endoscopic treatment of biliary tract disease (K1, S1, C1) 13. Prophylaxis of infections (K1, S1, C1) 14. Endoscopic treatment of GI bleeding (K1, S1, C1) 15. Operations performed in ER patients (K1, S1, C1) 16. Acute kidney injury Acute liver failure (K1, S1, C1) 17. Diabetic foot (K1, S1, C1) 18. Endometriosis – multidisciplinary problem (K1, S1, C1) 19. Dysphagia; surgery of the esophagus (K1, S1, C1) 20. Gastric cancer (K1, S1, C1) 21. Malignances of the gallbladder and biliary tract (K1, S1, C1) 22. Laproscopic vs open cholecystectomy (video) (K1, S1, C1) 23. Abdominal hernias (K1, S1, C1) 24. Laparoscopic surgery (K1, S1, C1) 25. GERD (K1, S1, C1) 26. Laparoscopic vs open hernioplasty (video) (K1, S1, C1) 27. ERAS protocol in surgery (K1, S1, C1) 28. Risk factors and complications in surgery (K1, S1, C1) 29. Intraoperative ultrasound examination (K1, S1, C1) 30. Use of CT and MR in the diagnosis of liver tumors (K1, S1, C1) 31. Colorectal surgery (K1, S1, C1) 32. Pancreatic diseases (K1, S1, C1) 33. Obesity surgery (K1, S1, C1) 34. Laparoscopic operation for morbid obesity (video) (K1, S1, C1) 35. Liver support (K1, S1, C1) 36. Interventional radiology in liver surgery (K1, S1, C1) 37. Surgical knots and suturing (practical training) (K1, S1, C1) 38. Liver tumors and liver trauma (K1, S1, C1) 39. Liver resection (K1, S1, C1) 40. Liver transplantation and living donation (K1, S1, C1) 41. Iatrogenic bile duct injuries (K1, S1, C1) 42. Liver procurement from deceased donors (K1, S1, C1) 43. Liver transplantation from deceased donor (video) (K1, S1, C1) 44. Surgical ICU (K1, S1, C1) 45. Ascites-diagnosis and treatment (K1, S1, C1) 46. The hepatology inpatient service 	
--	---	--

7. LITERATURE

Obligatory

1. Essentials of General Surgery, by Peter Lawrence.
2. Current Surgical Diagnosis and Treatment, by Lawrence W. Way.
3. General Surgery, by Ritchie P. Wallace.
4. The Student's Textbook of Surgery, by William M. Rambo.
5. Essential Surgery: Problems, Diagnosis, and Management, by George H Burkitt.
6. Basic Surgery, by Hiram C Polk, Jr

Supplementary

8. VERIFYING THE EFFECT OF LEARNING

Code of the course effect of learning	Ways of verifying the effect of learning	Completion criterion
e.g. G.K1, G.S1, K1	<i>This field defines the methods used for grading students e.g. pop quiz, test, written report etc.</i>	e.g. threshold number of points
	Multiple choice question test (MCQ)	Pass: (9/16 correct questions =60% and above) Fail: (8/16 correct questions = 50% and below)

9. ADDITIONAL INFORMATION (*information essential for the course instructor that are not included in the other part of the course syllabus e.g. if the course is related to scientific research, detailed description of, information about the Science Club*)

Medical University of Warsaw has property rights, including copyright, to the syllabus. The syllabus may be used for educational purposes at the MUW only. Using of the syllabus for other purposes requires consent of the MUW.

ATTENTION

The final 10 minutes of the last class in the block/semester/year should be allocated to students' Survey of Evaluation of Classes and Academic Teachers.



Pediatric Surgery

1. IMPRINT

Academic Year	2023/2024
Department	Faculty of Medicine
Field of study	Medicine
Main scientific discipline	Medical Science
Study Profile	General academic
Level of studies	Uniform MSc
Form of studies	Full time studies
Type of module / course	Obligatory
Form of verification of learning outcomes	Credit
Educational Unit / Educational Units	Department of Cardiac Surgery (1WR1) Żwirki i Wigury 63A, Pediatric Hospital, 5 th Floor. Seminar Room E 001, phone: (+48 22) 317 98 81, e-mail: kardiochirurgiadzieci@wum.edu.pl
Head of Educational Unit / Heads of Educational Units	Prof. Mariusz Kuśmierczyk MD, PhD
Course coordinator	Wojciech Mądry MD, phone: (+48 22) 317 98 92, e-mail: wmadry@wum.edu.pl
Person responsible for syllabus)	Michał Buczyński MD, phone: (+48 22) 317 98 81, e-mail: mbuczynski2@wum.edu.pl

Teachers	prof. Mariusz Kuśmierczyk MD, PhD Michał Buczyński MD, PhD Jacek Kuźma MD, PhD Wojciech Mądry MD, PhD Michał Zawadzki MD Karolina Szymczak MD Radosław Wilimski MD, PhD Mateusz Kuć MD, PhD Bartosz Kubisa MD, PhD Adam Arendarczyk MD
-----------------	---

2. BASIC INFORMATION

Year and semester of studies	4 th Year. 7 th semester	Number of ECTS credits	2.00
FORMS OF CLASSES		Number of hours	ECTS credits calculation
Contacting hours with academic teacher			
Lecture (L)			
Seminar (S)		15	1.00
Classes (C)		15	1.00
e-learning (e-L)			
Practical classes (PC)			
Work placement (WP)			
Unassisted student's work			
Preparation for classes and completions			

3. COURSE OBJECTIVES

O1	Qualification rules for surgery in children (neonates, infants, adolescents)
O2	Implementation of procedures for injuries management in children
O3	Understanding of pathophysiology, diagnostics and indications for congenital heart surgery

4. STANDARDS OF LEARNING – DETAILED DESCRIPTION OF EFFECTS OF LEARNING *(concerns fields of study regulated by the Regulation of Minister of Science and Higher Education from 26 of July 2019; does not apply to other fields of study)*

Code and number of effect of learning in accordance with standards of learning	Effects in the field of: <i>(in accordance with appendix to the Regulation of Minister of Science and Higher education from 26th of July 2019)</i>
---	---

Knowledge – Graduate* knows and understands:

F.W1: 1, 2, 3, 4	causes, symptoms, principles of diagnosis and therapeutic treatment in relation to the most common diseases requiring surgical intervention taking into account the distinctions of childhood, in particular: (1) acute and chronic diseases of abdominal cavity, (2) chest diseases, (3) limb and head diseases, (4) bone fractures and organ injuries;
F.W2	specific paediatric surgery, including traumatology, otolaryngology, acquired defects and diseases in children which require surgical treatment
F.W3	rules of qualification and performance, as well as the most common complications of basic surgical procedures and invasive diagnostic and therapeutic procedures
F.W4	principles of perioperative safety, patient preparation for surgery, general and local anaesthesia and controlled sedation
F.W5	post-operative treatment with analgesic therapy and postoperative monitoring
F.W6	indications for and principles of use of intensive care
F.W7	applicable recommendations concerning resuscitation of newborns, children and adults
F.W10: 1, 2, 3.	problems of contemporary imaging studies, in particular: (1) radiological symptomatology of basic diseases, (2) instrumental methods and imaging techniques used to perform therapeutic procedures, (3) indications, contraindications and preparation of patients for particular types of imaging examinations and contraindications to the use of contrast agents;
F.W13	causes, symptoms, principles of diagnosis and therapeutic treatment in the case of the most common diseases of the central nervous system in terms of: (1) cerebral oedema and its consequences with a particular reference to emergencies, (2) other forms of intracranial narrowness with their consequences, (3) cranial-cerebral injuries, (4) vascular defects of the central nervous system, (5) tumours of the central nervous system, (6) diseases of the spine and spinal cord;
E.W3, 2	E.W3 causes, symptoms, principles of diagnosis and therapeutic treatment of the most common diseases in children: (2) heart defects, myocarditis, endocarditis and pericarditis, cardiomyopathy, abnormal heart rhythm, cardiac failure, hypertension, syncope,
E.W3, 5	E.W3 (5) acute and chronic abdomen pain, vomiting, diarrhoea, constipations, alimentary canal bleedings, peptic ulcer disease, non-specific intestine diseases, pancreas diseases, cholestasis and liver diseases and other acquired diseases and congenial defects of the alimentary canal,
E.W3, 6	E.W3 (6) urinary system infections, congenial defects of the urinary system, nephrotic syndrome, nephrolithiasis, acute and chronic renal failure, acute and chronic renal inflammations, systemic renal diseases, urination disorders, vesicoureteral reflux,
E.W5	basic methods of diagnosing and treating the foetus;

Skills– Graduate* is able to:

E.U14	recognize immediate threats to life;
F.U1	assist in a typical surgery, prepare the surgical field and use local anaesthetics at the operated area
F.U2	use the basic surgical tools
F.U3	observe the rules of asepsis and antisepsis
F.U4	dress a simple wound, apply and change a sterile surgical dressing
F.U7	assess the result of radiographic studies in terms of the most frequent kinds of fractures, especially long bone fractures

F.U8	immobilise a limb temporarily, choose the kind of immobilisation necessary to be applied in typical clinical cases and control the appropriate blood flow in the limb after an immobilising dressing is put on
F.U12	monitor perioperative care with the aid of basic vital signs
F.U21	assess an unconscious patient according to the international point scales;
F.U22	diagnose the symptoms of intracranial hypertension;

* In appendix to the Regulation of Minister of Science and Higher education from 26th of July 2019 „graduate”, not student is mentioned.

5. ADDITIONAL EFFECTS OF LEARNING (non-compulsory)	
Number of effect of learning	Effects in the fields of:
Knowledge – Graduate knows and understands:	
K1	Diagnostics of peritonitis in children
K2	Pathophysiology of selected congenital heart defects qualified for surgery
Skills– Graduate is able to:	
S1	Diagnostics of acute appendicitis.
S2	Rules of qualification for cardiovascular surgery in childhood
S3	First-Aid thermal burns treatment
Social Competencies – Graduate is ready for:	
SC1	

6. CLASSES		
Form of class	Class contents	Effects of Learning
Seminar 1	<i>Diagnostics & Surgery for Congenital Heart Defects</i>	G.K1, GK3, GS1, S2,
Seminar 2	<i>Selected Respiratory Tract Malformations</i>	GK1
Seminar 3	<i>Management of Burn Injury in Children</i>	GK2, S3
Seminar 4	<i>One-day-stay Surgical Procedures</i>	GK1
S5/S5	<i>Trauma day (Neurotraumatology Dept)</i>	GK1, GK4, GS2
Seminar 6	<i>Neonatal Surgery</i>	GK1, GK3
Seminar 7	<i>Appendicitis and Acute Abdominal Diseases</i>	GK1, K1, S1
Seminar 8	<i>Pediatric Urology</i>	GK1
C	<i>Burn injury management</i>	S3
C	<i>Trauma management in children</i>	GK2

C	<i>General Ward Round</i>	GS1
C	<i>OR – operative room</i>	GK1, GS1

7. LITERATURE

Obligatory

1. Pediatric Surgery. 7th. Edition. Coran A.G. Elsevier Inc.Saunders. 2012 ISBN: 978-0-323-07255

Supplementary

1. Imaging Trauma and Polytrauma in Pediatric Patients. Miele V., Trinci M. Springer, Berlin, 2014
2. Pediatric Traumatic Brain Injury: Update 2010 - From Basic Research to Clinical Practice 1st Edition by M.C. McKenna (Editor), L.J. Noble-Haeusslein (Editor), C.L. Robertson (Editor)

8. VERIFYING THE EFFECT OF LEARNING

Code of the course effect of learning	Ways of verifying the effect of learning	Completion criterion
<i>e.g. G.K1, G.S1, K1</i>	<i>This field defines the methods used for grading students e.g. pop quiz, test, written report etc.</i>	<i>e.g. threshold number of points</i>
F.W1: 1, 2, 3, 4, F.W2, F.W3, F.W4, F.W5, F.W6, F.W7, F.W10: 1, 2, 3., F.W13, E.W3, 2, E.W3, 5, E.W3, 6, E.W5. E.U14, F.U1, F.U2, F.U3, F.U4, F.U7, F.U8, F.U12, F.U21, F.U22. K1-K2, S1-S3.	Final Assessment Test ; multiple choice test questions checking the knowledge provided by lecturers (20 questions,4-5 choices, only 1 right answer, 20 minutes time).	12 or less - failed (2) 13 – satisfactory (3) 14 – rather good (3,5) 15-16 good (4) 17-18 more than good (4.5) 19-20 very good (5)

9. ADDITIONAL INFORMATION (information essential for the course instructor that are not included in the other part of the course syllabus e.g. if the course is related to scientific research, detailed description of, information about the Science Club)

Initial requirements: 1.Detailed knowledge of gross anatomy and physiology.
2.Understanding of modern diagnostic tools (usg, CT, MR, Xray)

!!!!!!! All seminars start at 8 o'clock. We do not accept students after 8 AM !!!!!!!

Medical University of Warsaw has property rights, including copyright, to the syllabus. The syllabus may be used for educational purposes at the MUW only. Using of the syllabus for other purposes requires consent of the MUW.

ATTENTION

The final 10 minutes of the last class in the block/semester/year should be allocated to students' Survey of Evaluation of Classes and Academic Teachers



Internal Diseases – Hematology

1. IMPRINT

Academic Year	2023/2024
Department	Faculty of Medicine
Field of study	Medicine
Main scientific discipline	Medical Science
Study Profile	General academic
Level of studies	Uniform MSc
Form of studies	Full time studies
Type of module / course	Obligatory
Form of verification of learning outcomes	Completion
Educational Unit / Educational Units	Department of Hematology, Transplantation and Internal Medicine 1a Banacha St, 02-097 Warsaw Phone: 48 22 599 28 18; e-mail: hematologia@wum.edu.pl
Head of Educational Unit / Heads of Educational Units	Prof. Grzegorz Basak, M.D., Ph.D
Course coordinator	Rafał Machowicz M.D. Ph.D.; rmachowicz@wum.edu.pl
Person responsible for syllabus	Rafał Machowicz M.D. Ph.D.; rmachowicz@wum.edu.pl
Teachers	Prof. Grzegorz Basak M.D. Ph.D., Prof. Wiesław Wiktor Jędrzejczak M.D. Ph.D., Prof. Krzysztof Jamrozak M.D. Ph.D, Agnieszka Tomaszewska M.D. Ph.D., Jarosław Biliński M.D. Ph.D., Piotr Boguradzki, M.D. Ph.D., Joanna Drozd-Sokołowska M.D. Ph.D., Krzysztof Mądry M.D. Ph.D., Mateusz Ziarkiewicz, M.D. Ph.D., Ewa Karakulska-Prystupik, M.D. Magdalena Matek M.D. Ph.D., Sara Zawadzka-Leska, M.D, Ph.D., Piyush Vyas, M.D., Piotr Kowalczyk M.D., Marcin Jasinski, M.D., Rafał Machowicz M.D. Ph.D.

2. BASIC INFORMATION

Year and semester of studies	4th in 6-year program, Winter and Summer semesters	Number of ECTS credits	2.00
FORMS OF CLASSES	Number of hours	ECTS credits calculation	
Contacting hours with academic teacher			
Lecture (L)			
Seminar (S)	20	0.8	
Discussions (D)	10	0.8	
e-learning (e-L)			
Practical classes (PC)			
Work placement (WP)			
Unassisted student's work			
Preparation for classes and completions	15	0.4	

3. COURSE OBJECTIVES	
O1	Preparation of students to diagnose neoplastic and non-neoplastic disorders of the blood
O2	Preparation of students to use methods of supportive care essential for patients with blood disorders
O3	Preparation of students for referring patients with blood disorders to obtain specialist hematological care through learning indications, principles and possibilities of modern therapies used in hematology

4. STANDARDS OF LEARNING – DETAILED DESCRIPTION OF EFFECTS OF LEARNING	
Code and number of the effect of learning in accordance with standards of learning	Effects in the field of: <i>(in accordance with appendix to the Regulation of Minister of Science and Higher education from 26th of July 2019)</i>
Knowledge – Graduate* knows and understands:	
B.W19	Basic aspects associated with stem cells and their medical use.
C.W6	Genetic basis for human blood groups and Rh serologic conflict
C.W7	Chromosome aberrations causing oncogenesis
C.W25	Genetic basis for donor and recipient matching
E.W7, p. 6	Causes, symptoms, principles of diagnosis and therapeutic management for the most frequent blood disorders affecting adults, as well as their complications, including: aplastic anemia, anemia, neutropenia and

	agranulocytosis, thrombocytopenia, acute leukemia, myeloproliferative and myelodysplastic-myeloproliferative neoplasms, myelodysplastic syndromes, neoplasms of mature T and B cells, bleeding disorders, thrombophilia, disturbances in blood in the course of other organ disorders.
E.W23	Environmental and epidemiological features of the most common neoplastic blood disorders
E.W41	Capabilities and limitations of laboratory tests in emergency states

Skills– Graduate* is able to:

C.U3	Decide on the need of cytogenetic and molecular testing
E.U1	Take medical history related to neoplastic and nonneoplastic blood disorders from an adult patient
E.U3	Perform a full physical examination of an adult patient with particular attention to detection of symptoms of blood disorders and-/or evaluation of their progression/regression
E.U12	Perform differential diagnosis of the most frequent blood disorders in an adult patient
E.U14	Diagnose conditions associated with a direct threat to life produced by neoplastic and non-neoplastic blood disorders
E.U16	Plan diagnostic, therapeutic and prophylactic actions
E.U20	Qualify patients with suspected/confirmed blood disorders to outpatient/inpatient care
E.U24	Interpret laboratory results (especially: complete blood count, protein abnormalities, and coagulogram) and identify causes of their abnormalities
F.U6	Examine lymph nodes

* In appendix to the Regulation of Minister of Science and Higher education from 26th of July 2019 „graduate”, not student is mentioned.

5. ADDITIONAL EFFECTS OF LEARNING (non-compulsory)

Number of effect of learning	Effects in the fields of:
------------------------------	---------------------------

Knowledge – Graduate knows and understands:

B.W29	Principles of observational, experimental and in vitro research aiming at development of medical science

Skills– Graduate is able to:

B.U10	Use databases, including internet ones, and look for specific information using available tools.
B.U12	Explain differences between prospective and retrospective studies, randomized and case-control studies, case descriptions and experimental studies and put them in order according to reliability and quality of scientific evidence

Social Competencies – Graduate is ready for:

SC1	
-----	--

6. CLASSES		
Form of class	Class contents	Effects of Learning
Seminar 1	Introduction to hematology	E.W23, C.W7,
Seminar 2-3	Acute Leukemias	E.W7, E.W23,
Seminar 4	Myelodysplastic Syndromes (MDS)	C.W7, E.W7, E.W23, C.U3
Seminar 5-6	Myeloproliferative Neoplasms (MPN)	E.W7, E.W41, E.U16
Seminar 7	Introduction to transfusion medicine	C.W6, E.W7,
Seminar 8-9	Coagulation disorders	C.W7, E.W7, E.W23,
Seminar 10-11	Plasma cell dyscrasias. Plasma Cell Myeloma	E.W7, E.W23,
Seminar 12	Hematopoietic Stem Cell Transplantation	B.W19, C.W25
Seminar 13	Hodgkin Lymphoma.	E.W7, E.W23, C.U3, F.U6
Seminar 14-15	Cytopenias (Neutropenia & Thrombocytopenia)	E.W7, E.W23, E.W41, E.U20
Seminar 16	Non-hemolytic anemias	E.W7, E.W23,
Seminar 17	Hemolytic anemias	E.W7, E.W23,
Seminar 18-19	Non-Hodgkin Lymphomas	E.W7, E.W23,
Seminar 20	Chronic Lymphocytic Leukemia	E.W7, E.W23, E.U20
Classes 1-10	Practical classes	C.U3, E.U1, E.U3, E.U12, E.U14, E.U16, E.U20, E.U24, E.U30, E.W7, F.U6, B.W19, C.W7, C.W25, E.W41, B.W29, B.U10, B.U12

7. LITERATURE
Obligatory
Presentations from seminars at e-learning platform
Supplementary
Harrison's Principles of Internal Medicine - current edition Herold: Internal Medicine –current edition

8. VERIFYING THE EFFECT OF LEARNING		
Code of the course effect of learning	Ways of verifying the effect of learning	Completion criterion
B.W19, E.W7, E.W23, C.W7, C.U3, E.W41, E.U16, C.W6, C.W25, E.U20	Active participation in seminars	Presence at all seminars
C.U3, E.U1, E.U3, E.U12, E.U14, E.U16,	Active participation in practical classes	Presence at all practical classes

EU.20, EU.24, E.U30, E.W7, F.U6, B.W19, C.W7, C.W25, E.W41		
B.W19, C.W6, C.W7, C.W25, E.W7, E.W23, E.W41 C.U3, E.U12, E.U14, E.U16, E.U24	Multiple choice question test (MCQ)	60% of correct answers 2.0 (failed) 0-17 points from the test 3.0 (satisfactory) 18-20 points from the test 3.5 (rather good) 21-22 points from the test 4.0 (good) 23-25 points from the test 4.5 (more than good) 26-28 points from the test 5.0 (very good) 29-30 points from the test

9. ADDITIONAL INFORMATION

Students are invited to join Student Scientific Group – tutored by Prof. Wiesław Wiktor Jędrzejczak, M.D., Ph.D.

Medical University of Warsaw has property rights, including copyright, to the syllabus. The syllabus may be used for educational purposes at the MUW only. Using of the syllabus for other purposes requires consent of the MUW.

ATTENTION

The final 10 minutes of the last class in the block/semester/year should be allocated to students' Survey of Evaluation of Classes and Academic Teachers.



Internal Medicine – Cardiology

1. IMPRINT

Academic Year	2023/2024
Department	Faculty of Medicine
Field of study	Medicine
Main scientific discipline	Medical Science
Study Profile	General academic
Level of studies	Uniform MSc
Form of studies	Full time studies
Type of module / course	obligatory
Form of verification of learning outcomes	completion
Educational Unit / Educational Units	1st Department of Cardiology, 1A Banacha St., 02-097 Warsaw, POLAND
Head of Educational Unit / Heads of Educational Units	prof. dr hab. Marcin Grabowski
Course coordinator	Dr Michał Marchel, 22 599 19 58

Person responsible for syllabus	Dr Michał Marchel, 22 599 19 58
Teachers	Marcin Grabowski MD, Paweł Balsam MD, Aleksandra Gąsecka MD, Renata Głównyńska MD, Ewa Szczerba MD, Martyna Zaleska MD, Jakub Maksym MD, Agata Tymińska MD, , Krzysztof Ozierański MD, Karol Zbroński MD, Łukasz Januszkiewicz MD, Michał Peller MD, Szymon Jonik MD, Agnieszka Kołodzińska MD, Michał Konwerski MD, Dorota Ochijewicz MD, Michał Kowara MD, Cezary Maciejewski MD, Jakub Rokicki MD, Marek Wawrzacz MD, Michał Marchel MD.

2. BASIC INFORMATION

Year and semester of studies	4th year, 7th and 8th semester	Number of ECTS credits	2.00
FORMS OF CLASSES		Number of hours	ECTS credits calculation
Contacting hours with academic teacher			
Lecture (L)			
Seminar (S)		10	0,67
Classes (C)		20	1,33
e-learning (e-L)			
Practical classes (PC)			
Work placement (WP)			
Unassisted student's work			
Preparation for classes and completions		5	0

3. COURSE OBJECTIVES

O1	Ability to diagnose and treat of common cardiovascular diseases as: ischemic heart diseases, valvular diseases, diseases of pericardium, endocardium and myocardium, acute and chronic heart failure, arterial hypertension primary and secondary, common diseases of artery and veins, pulmonary hypertension.
----	---

4. STANDARDS OF LEARNING – DETAILED DESCRIPTION OF EFFECTS OF LEARNING (*concerns fields of study regulated by the Regulation of Minister of Science and Higher Education from 26 of July 2019; does not apply to other fields of study*)

Code and number of effect of learning in accordance with standards of learning	Effects in the field of: (<i>in accordance with appendix to the Regulation of Minister of Science and Higher education from 26th of July 2019</i>) E.W.7 E.U.1; E.U.3: E.U.13 E.U 12; E.U.16
---	--

Knowledge – Graduate* knows and understands:

G.K1	Knowledge of etiology, symptoms, diagnostics and treatment of common cardiovascular diseases as: ischemic heart diseases, valvular diseases, diseases of pericardium, endocardium and myocardium, acute and chronic heart failure, arterial hypertension primary and secondary, common diseases of artery and veins, pulmonary hypertension.
G.K1/ E.W7 p.1	Knowledge of reasons, symptoms, diagnostic and treatment procedures of the most frequent internal diseases and their complications in adult patients: 1) circulatory system diseases, including coronary heart disease, heart defects, endocardium disease, cardiomyopathy, pericardium diseases, cardiac failure (acute and chronic), artery and vein diseases, hypertension: essential and secondary, pulmonary hypertension,

Skills– Graduate* is able to:

G.S1/ E.U29 p. 8	Skills: history taking and physical examination of patients with cardiovascular diseases, basic interpretation of electrocardiography, indication for visualization tests like echocardiography, computed tomography, magnetic resonance imaging and coronary angiography
G.S1/ E.U1	collect medical history from adult patients
G.S2/ E.U3	conduct a complete and targeted physical examination in adults;
G.S3/ E.U12	perform the differential diagnosis of the most common diseases in adults and children;
G.S4/ E.U13	assess and describe the patient's somatic and psychological states;
G.S5/ E.U16	plan diagnostic, therapeutic and preventive treatment;

* In appendix to the Regulation of Minister of Science and Higher education from 26th of July 2019 „graduate”, not student is mentioned.

5. ADDITIONAL EFFECTS OF LEARNING (*non-compulsory*)

Number of effect of learning	Effects in the fields of:
-------------------------------------	----------------------------------

Knowledge – Graduate knows and understands:

K1	As above
----	----------

Skills– Graduate is able to:

S1	As above
----	----------

Social Competencies – Graduate is ready for:

SC1	As above
-----	----------

6. CLASSES

Form of class	Class contents	Effects of Learning
Seminars/e-learning/bedside classes	Signs and symptoms of cardiovascular diseases	E.W.7
Seminars/e-learning/bedside classes	Acute coronary syndromes with persistent ST elevation	
Seminars/e-learning/bedside classes	Acute coronary syndromes without persistent ST elevation	
Seminars/e-learning/bedside classes	Heart Failure	
Seminars/e-learning/bedside classes	Bradyarrhythmias and cardiac pacing	
Seminars/e-learning/bedside classes	Tachyarrhythmias and ablation	
Seminars/e-learning/bedside classes	Pulmonary embolism	
Seminars/e-learning/bedside classes	Valvular heart disease	
Seminars/e-learning/bedside classes	Ischemic heart disease – pathogenesis, clinical features, primary and secondary prevention	

7. LITERATURE

Obligatory

1. Eugene Braunwald, ed., Heart Disease. A Textbook of Cardiovascular Medicine, 11th edition, Philadelphia: W.B. Saunders Company, 2018.
2. John Camm, Thomas F. Lüscher, Gerard Maurer Patrick Serruys The ESC Textbook of Cardiovascular Medicine (3 edn), OUP Oxford, 2019.
3. Brian P. Griffin Manual of Cardiovascular medicine, 4th edition, Lippincott Williams & Wilkins, 2013.
4. Guidelines of the European Society of Cardiology (<http://www.escardio.org/guidelines-surveys/esc-guidelines/Pages/GuidelinesList.aspx>)

Supplementary

8. VERIFYING THE EFFECT OF LEARNING

Code of the course effect of learning	Ways of verifying the effect of learning	Completion criterion
E.W.7	Oral credit	Oral credit

9. ADDITIONAL INFORMATION (information essential for the course instructor that are not included in the other part of the course syllabus e.g. if the course is related to scientific research, detailed description of, information about the Science Club)

Dress code	Medical clothing with short sleeves is recommended. Avoid wearing private clothing on the hospital grounds. If medical coats are used for private clothing, they must be fastened. Long hair must be tied up. It is necessary to change footwear to work footwear in accordance with the regulations. If diagnostic gloves are used, they should be put on after hand washing and / or disinfection, immediately prior to contact with the patient.
Cardiology Club	contact: Marek Wawrzacz MD; marekjakub.wawrzacz@gmail.com

Medical University of Warsaw has property rights, including copyright, to the syllabus. The syllabus may be used for educational purposes at the MUW only. Using of the syllabus for other purposes requires consent of the MUW.

ATTENTION

The final 10 minutes of the last class in the block/semester/year should be allocated to students' Survey of Evaluation of Classes and Academic Teachers.



Internal Medicine – Pulmonology

1. IMPRINT

Academic Year	2023/2024
Department	Faculty of Medicine
Field of study	Medicine
Main scientific discipline	Medical Science
Study Profile	General academic
Level of studies	Uniform MSc
Form of studies	Full time studies
Type of module / course	Obligatory
Form of verification of learning outcomes	Credit
Educational Unit / Educational Units	3rd Department of Lung Diseases and Oncology, National Tuberculosis and Lung Diseases Research Institute 26 Płocka Str., 01-138 Warsaw, ph: 48 22 43 12 108, e-mail: 3klinika@igichp.edu.pl www: https://www.igichp.edu.pl/3-klinika-chorob-pluc/
Head of Educational Unit / Heads of Educational Units	Mateusz Polaczek MD PhD, e-mail: m.polaczek@igichp.edu.pl
Course coordinator	Janusz SZOPIŃSKI, MD, PhD, email: szopinski@tlen.pl , phone: 22 4312279
Person responsible for syllabus	Janusz SZOPIŃSKI, Md, PhD

Teachers	Mateusz POLACZEK, MD, PhD, Janusz SZOPIŃSKI, Md, PhD and Department's team
-----------------	--

2. BASIC INFORMATION

Year and semester of studies	4th year, 7th semester	Number of ECTS credits	2.00
FORMS OF CLASSES		Number of hours	ECTS credits calculation
Contacting hours with academic teacher			
Lecture (L)		-	
Seminar (S)		20	0,67
Classens (C)		10	0,67
e-learning (e-L)		-	
Practical classes (PC)		-	
Work placement (WP)		-	
Unassisted student's work			
Preparation for classes and completions		5	0,66

3. COURSE OBJECTIVES

O1	The aim of the course is to give basic information about: (i.) etiology and symptoms in pulmonology that are meet during work as general practitioner; (ii.) diagnostic procedures and tests used in pulmonology and interpretation of the results; (iii.) management of the most common pulmonary diseases.
----	--

4. STANDARDS OF LEARNING – DETAILED DESCRIPTION OF EFFECTS OF LEARNING (concerns fields of study regulated by the Regulation of Minister of Science and Higher Education from 26 of July 2019; does not apply to other fields of study)

Code and number of effect of learning in accordance with standards of learning	Effects in the field of: <i>(in accordance with appendix to the Regulation of Minister of Science and Higher education from 26th of July 2019)</i> E.W7, E.W23, E.W32 E.W1 E.U1, E.U3, E.U12, E.U17, E.U24, E.U29, E.U30
Knowledge – Graduate* knows and understands:	
G.K1/ E.W1	Graduate has the knowledge about environmental and epidemiological determinants of the most common illnesses in particular the lung diseases.
G.K2/ E.W7, 2	Graduate knows the reasons, symptoms, diagnostic and treatment procedures of the most frequent internal diseases and their complications in adult patients:

	2) respiratory system diseases, including respiratory tract diseases, chronic obstructive pulmonary disease, bronchial asthma, bronchiectasis, cystic fibrosis, respiratory system infections, interstitial lung diseases, pleural diseases, mediastinal disorders, obstructive and central sleep apnoea, respiratory failure (acute and chronic), respiratory system cancers,
G.K3	Graduate knows the basis of pharmacology in pulmonology.

Skills– Graduate* is able to:

G.S1/ E.U1	Mastering the theoretical knowledge of pulmonology. Practical exercises with patients: anamnesis, physical examination and discussion that additional studies are necessary to establish the diagnosis (collect medical history from adult patients).
G.S2/ E.U 3	Student extends the knowledge and masters their skills in the scope of pulmonology, student plans diagnostic procedures and therapeutic interventions (conduct a complete and targeted physical examination in adults)
E.U12	perform the differential diagnosis of the most common diseases in adults and children;
E.U17	analyse the side effects of particular medicines and interactions between them;
E.U24	interpret laboratory test results with the identification of reasons for deviation;
E.U29	perform the basic medical procedures, including: 2) vital signs monitoring with the aid of a pulse oximeter and cardiac monitor,
E.U30	assist in the following procedures and medical treatments: 2) pleural cavity drainage, 6) fine-needle aspiration, 7) epidermal tests, 8) intradermal and scarification tests, as well as interpret their results;

* In appendix to the Regulation of Minister of Science and Higher education from 26th of July 2019 „graduate”, not student is mentioned.

5. ADDITIONAL EFFECTS OF LEARNING (non-compulsory)

Number of effect of learning	Effects in the fields of:
------------------------------	---------------------------

Knowledge – Graduate knows and understands:

K1	As above
----	----------

Skills– Graduate is able to:

S1	As above
----	----------

Social Competencies – Graduate is ready for:

SC1	As above
-----	----------

6. CLASSES

Form of class	Class contents	Effects of Learning
Seminars /bedside classes	Some aspects of the diagnosis of chest diseases	
Seminars /bedside classes	Basic radiologic signs and pathology	

Seminars /bedside classes	Diagnosis of airways	
Seminars /bedside classes	Respiratory failure	
Seminars /bedside classes	Pneumonia	
Seminars /bedside classes	Tuberculosis diagnosis and treatment	
Seminars /bedside classes	Tuberculosis pneumonia in radiology	
Seminars /bedside classes	Lung cancer	
Seminars /bedside classes	The role of smoking	
Seminars /bedside classes	Asthma, diagnosis and treatment	
Seminars /bedside classes	COPD	
Seminars/bedside classes	Lung function in restrictive lung diseases	
Seminars /bedside classes	Sarcoidosis	
Seminars /bedside classes	Thromboembolic disease	
Seminars /bedside classes	Diseases of the pleura	

7. LITERATURE

Obligatory

Harrison's Principles of Internal Medicine. Ed. Kurt J. I et al. McGraw-Hill, Inc.

Supplementary

Clinical Pulmonary Medicine. Ed. Little, Brown and Company, Boston

8. VERIFYING THE EFFECT OF LEARNING

Code of the course effect of learning	Ways of verifying the effect of learning	Completion criterion
EW7	Oral credit	50%

9. ADDITIONAL INFORMATION (information essential for the course instructor that are not included in the other part of the course syllabus e.g. if the course is related to scientific research, detailed description of, information about the Science Club)

.

Medical University of Warsaw has property rights, including copyright, to the syllabus. The syllabus may be used for educational purposes at the MUW only. Using of the syllabus for other purposes requires consent of the MUW.

ATTENTION

The final 10 minutes of the last class in the block/semester/year should be allocated to students' Survey of Evaluation of Classes and Academic Teachers.



Internal Medicine – Rheumatology

1. IMPRINT

Academic Year	2023/2024
Department	Faculty of Medicine
Field of study	Medicine
Main scientific discipline	Medical Sciences
Study Profile	General academic
Level of studies	Uniform MSc
Form of studies	Full time studies
Type of module / course	Obligatory
Form of verification of learning outcomes	Credit
Educational Unit / Educational Units	Rheumatology Clinic and Polyclinic, National Geriatrics, Rheumatology and Rehabilitation Institute, 1 Spartańska St., 02-637 Warsaw tel. 48 22 670 92 12
Head of Educational Unit / Heads of Educational Units	Prof dr hab. n med Małgorzata Wiśłowska, M.D., Ph.D, Prof., mwisłowska@wp.pl
Course coordinator	Prof dr hab. n med Małgorzata Wiśłowska M.D., Ph.D, Prof.
Person responsible for syllabus	Prof dr hab. n med Małgorzata Wiśłowska M.D., Ph.D, Prof.

Teachers	Prof. dr hab. n. med Małgorzata Wiśłowska, dr n. med. Agnieszka Zielińska, dr n. med. Anna Nowakowska-Płaza, dr n. med. Krzysztof Bonek, dr n. med. Jakub Wroński, dr n. med. Jacek Falkowski
-----------------	---

2. BASIC INFORMATION

Year and semester of studies	4 th year, 7 & 8 semester	Number of ECTS credits	2.00
FORMS OF CLASSES		Number of hours	ECTS credits calculation
Contacting hours with academic teacher			
Lecture (L)			
Seminar (S)		20	1
Classes (C)		10	0,5
e-learning (e-L)			
Practical classes (PC)			
Work placement (WP)			
Unassisted student's work			
Preparation for classes and completions		10	0,5

3. COURSE OBJECTIVES

O1	Knowledge of the examination of musculoskeletal system
O2	Knowledge of syndromes of the main rheumatic diseases
O3	

4. STANDARDS OF LEARNING – DETAILED DESCRIPTION OF EFFECTS OF LEARNING (concerns fields of study regulated by the Regulation of Minister of Science and Higher Education from 26 of July 2019; does not apply to other fields of study)

Code and number of effect of learning in accordance with standards of learning	Effects in the field of: <i>(in accordance with appendix to the Regulation of Minister of Science and Higher education from 26th of July 2019)</i>
---	---

Knowledge – Graduate* knows and understands:

E.W1	Knowledge of environmental and epidemiological determinants of the most common illnesses
E.W3 p. 11	causes, symptoms, principles of diagnosis and therapeutic treatment of the most common diseases in children: 11) connective tissue diseases, rheumatic fever, juvenile arthritis, systemic lupus, dermatomyositis;

E.W7 p. 7	Knows and understands reasons, symptoms, diagnostic and treatment procedures of the most frequent internal diseases and their complications in adult patients: 7) rheumatic diseases, including systemic diseases of connective tissue, systemic vasculitis, arthritis with the involvement of the spine, bone metabolic diseases, in particular osteoporosis and osteoarthritis, gout,
-----------	---

Skills– Graduate* is able to:

E.U3	Student can conduct full physical examination adult patients with rheumatology diseases
E.U16	plan diagnostic, therapeutic and preventive procedures in patients with rheumatology diseases
E.U24	interpret laboratory test results with the identification of reasons for deviation in patients with rheumatology diseases

* In appendix to the Regulation of Minister of Science and Higher education from 26th of July 2019 „graduate”, not student is mentioned.

5. ADDITIONAL EFFECTS OF LEARNING (non-compulsory)

Number of effect of learning	Effects in the fields of:
------------------------------	---------------------------

Knowledge – Graduate knows and understands:

E.U23	Student knows the basic rehabilitation of patients with rheumatology diseases
E.W7	Students knows the etiology and pathogenesis of osteoporosis connected with rheumatology diseases

Skills– Graduate is able to:

EU23	propose a rehabilitation programme for the most common diseases;

Social Competencies – Graduate is ready for:

E.U1	Student is available to have a contact with adult patients with rheumatic diseases
------	--

6. CLASSES

Form of class	Class contents	Effects of Learning
Seminars	S.1. Immunopathogenesis of rheumatic diseases W1 S.2. Diagnostic tests and procedures in rheumatic diseases W1 S.3. Rheumatoid arthritis W1 S.4. Ankylosing spondylitis W1 S.5. Psoriatic arthritis W1 S.6. Systemic lupus erythematosus W1 S.7. Antyphospholipid syndrome W1 S.8. Sicca syndrome W1 S.9. Diffuse and limited cutaneous scleroderma W1 S.10. Polymyositis and dermatomyositis W1 S.11. Giant cel arteritis W1 S.12. Takayashu arteritis W1 S.13. Polyarteritis nodosa W1 S.14. Kawasaki disease W1	EW1, EW3, E.W7. E.U3, E.U24, E.U1

	S.15. Granulomatosis with polyangiitis (GPA) W1 S.16. Eosynophilic granulomatosis with polyangiitis (EGPA) W1 S.17. IgA vasculitis (IgAV) W1 S.18. IgG4 -related syndrome W1 S.19. Gout and hyperuricaemia W1 S.20. Osteoarthritis W1	
Discussions	D.1. Immunopathogenesis of rheumatic diseases EU1,EU3,EU24 D.2. Rheumatoid arthritis EU1,EU3,EU24 D.3. Spondyloarthritis EU1,EU3,EU24 D.4. Systemic lupus erythematosus EU1,EU3,EU24 D.5. Antyphospholipid syndrome EU1,EU3,EU24 D.6. Sicca syndrome EU1,EU3,EU24 D.7. Diffuse and limited cutaneous scleroderma EU1,EU3,EU24 D.8. Polymyositis and dermatomyositis EU1,EU3,EU24 D.9. Gout and hyperuricaemia EU1,EU3,EU24 D.10. Osteoarthritis EU1,EU3,EU24	

7. LITERATURE

Obligatory – Harrison's Principles of Internal Medicine, Mc Graw-Hill, 16 th edition
Rheumatology for English Division Students Wisłowska M WUM 2015

Supplementary EULAR Textbook on Rheumatology Diseases – BMJ 2018

8. VERIFYING THE EFFECT OF LEARNING

Code of the course effect of learning	Ways of verifying the effect of learning	Completion criterion
e.g. G.K1, G.S1, K1	<i>This field defines the methods used for grading students e.g. pop quiz, test, written report etc. Oral test</i>	<i>e.g. threshold number of points</i>
EW1, EW3, E.W7. E.U3, E.U24, E.U1	Oral test	60% of correct answers

9. ADDITIONAL INFORMATION (information essential for the course instructor that are not included in the other part of the course syllabus e.g. if the course is related to scientific research, detailed description of, information about the Science Club)

Regulations for the students during classes at the Rheumatology Department

1. The student is obliged to read the syllabus.
2. Seminars start at 9.00 a.m.
3. The students participate in classes (seminars and practice) only with their group.
4. The students must complete the entire course (all seminars and practical classes), or completed 100% of the online course on time. Any absence requires working off -absence is acceptable.
5. The student is obliged to follow the Medical University of Warsaw Regulations (available on the University's website).
6. During classes with patients, students keep seriousness and silence.
7. Meals and drinks should be consumed during breaks.
8. The students should obtain credits for rheumatology in the plan of study, but no later than 2 weeks after the end of the course.



CLINICAL IMMUNOLOGY

1. IMPRINT

Academic Year	2023/2024
Department	Faculty of Medicine
Field of study	Medicine
Main scientific discipline	Medical sciences
Study Profile	General academic
Level of studies	Uniform MSc
Form of studies	Full time studies
Type of module / course	Obligatory
Form of verification of learning outcomes	Credit
Educational Unit / Educational Units	<p>Department of Clinical Immunology 59 Nowogrodzka St, 02-006 Warsaw Tel.: (+48 22) 502 14 72, 502 12 60 Faks: (+48 22) 502 21 59 Secretary: Ewa Rusinowicz <ewa.rusinowicz(at)uckwum.pl>, Head: Dr hab. Radosław Zagożdżon <radoslaw.zagozdzon(at)wum.edu.pl> Didactic coordinator: Dr hab. Beata Kaleta <beata.kaleta(at)wum.edu.pl> https://zik.wum.edu.pl/</p>
Head of Educational Unit / Heads of Educational Units	Dr hab. n. med. Radosław Zagożdżon

Course coordinator	Dr hab. n. med. i n. o zdr. Beata Kaleta
Person responsible for syllabus	Dr hab. n. med. i n. o zdr. Beata Kaleta
Teachers	Dr hab. n. med. Radosław Zagożdżon Dr hab. n. med. i n. o zdr. Beata Kaleta Dr hab. n. med. i n. o zdr. Ryszard Międzybrodzki Dr hab. n. med. Jan Borysowski Dr n. med. Monika Kniolek Dr n. med. Tomasz Pilecki Dr n. med. Barbara Moszczuk Dr n. med. Natalia Krata

2. BASIC INFORMATION

Year and semester of studies	IV year, 7 semester	Number of ECTS credits	1.00
FORMS OF CLASSES		Number of hours	ECTS credits calculation
Contacting hours with academic teacher			
Lecture (L)			
Seminar (S)		10	0.5
Classes (C)		10	0.5
e-learning (e-L)			
Practical classes (PC)			
Work placement (WP)			
Unassisted student's work			
Preparation for classes and completions			

3. COURSE OBJECTIVES

O1	Presentation of aspects of immunological diagnostics (autoimmune and inflammatory diseases and organ transplantation)
O2	Presentation of aspects of organ transplantation, aftercare for patients with transplanted organs
O3	Presentation of aspects of autoimmune disorders

4. STANDARDS OF LEARNING – DETAILED DESCRIPTION OF EFFECTS OF LEARNING (*concerns fields of study regulated by the Regulation of Minister of Science and Higher Education from 26 of July 2019; does not apply to other fields of study*)

Code and number of effect of learning in accordance with standards of learning	Effects in the field of: (<i>in accordance with appendix to the Regulation of Minister of Science and Higher education from 26th of July 2019</i>)
---	---

Knowledge – Graduate* knows and understands:

G.K1	basics of diagnostics of gene and chromosomal mutations responsible for hereditary and acquired diseases, including cancer (C.W9)
G.K2	issues in the field of tumor immunology (C.W24)
G.K3	genetic bases of donor and recipient selection and basics of transplant immunology (C.W25)
G.K4	clinical forms of the most common diseases of systems and organs, metabolic diseases and disorders of water-electrolyte, hormonal and acid-base balance (C.W34)
G.K5	main mechanisms of drug action and their changes in the system depending on age (C.W36)
G.K6	major drug side effects, including drug interactions (C.W37)
G.K7	the possibilities of modern cancer therapy, including multimodal therapy, the prospects of cell and gene therapy and their undesirable effects (E.W25)
G.K8	theoretical and practical laboratory diagnostics (E.W40)
G.K9	the basic scope the issues of surgical transplantation, indications for the transplantation of irreversibly damaged organs and tissues, and related procedures (F.W14)

Skills– Graduate* is able to:

G.S1	use the antigen-antibody reaction in current modifications and techniques for the diagnosis of infectious, allergic, autoimmune and neoplastic diseases and blood diseases (C.U8)
G.S2	associate the images of tissue and organ damage with clinical symptoms of the disease, history and laboratory results (C.U11)
G.S3	collect and bank biological material for research used in laboratory diagnostics (E.U28)

* In appendix to the Regulation of Minister of Science and Higher education from 26th of July 2019 „graduate”, not student is mentioned.

5. ADDITIONAL EFFECTS OF LEARNING (*non-compulsory*)

Number of effect of learning	Effects in the fields of:
-------------------------------------	----------------------------------

Knowledge – Graduate knows and understands:

K1	
K2	

Skills– Graduate is able to:

S1	
----	--

Social Competencies – Graduate is ready for:

SC1	
-----	--

6. CLASSES

Form of class	Class contents	Effects of Learning
Seminars (S1-S10)	S1- Introduction to clinical immunology – part 1 S2 - The role of autoimmunity in the pathogenesis of diseases S3 - The role of autoimmunity in the pathogenesis of endocrine system diseases S4 - Immunology of atherosclerosis S5 - Immunology of pregnancy S6 - The role of vitamin D and vitamin D receptor in autoimmune diseases S7 - Cancer as a complication of immunosuppressive therapy – part 1 S8 - Posttransplant complications S9 - HLA typing in clinical immunology - principles of selecting the donor/recipient pairs S10 - Flow cytometry - protocol, principle, basics, applications	G.K1-G.K9
Practical classes (PC1-PC10)	PC1 - Posttransplant complications (immunosuppression) – part 1 PC2 - Posttransplant complications (immunosuppression) – part 2 PC3 - Case presentation: asthma, SLE, vasculitis and vasculitides, rheumatoid disease PC4 - Case presentation: Immunocompromised patients PC5 - Case presentation: primary immunodeficiency patients PC6 - Case presentation: autoinflammatory diseases PC7 - HLA typing in clinical immunology PC8 - Proliferation assay and other immunological tests as a measure of immune competence PC9 - Flow cytometry in clinical immunology PC10 - Clinical aspects of immunosuppression	G.S1-G.S3

7. LITERATURE

Obligatory

Male D., Brostoff J., Roth D. B., Roitt I.: “Immunology” – seventh edition – 2006, Mosby Elsevier.

Supplementary

1. Abul K. Abbas, Andrew H. Lichtman: “Basic Immunology – Functions and Disorders of the Immune System” .
2. David M. Edgar: “Immunology-Master Medicine” (A core text with self – assessment) – 2005, Elsevier Churchill Livingstone
3. Robert R. Rich, Thomas A. Fleisher, William T. Shearer, Harry W. Schroeder Jr, Anthony J. Frew, Cornelia M. Weyand: “Clinical Immunology: Principles and Practice”, Third Edition 2008. Mosby Elsevier.
4. Reginald M. Gorczynski, Jaqueline Stanley: “Problem–Based Immunology”. 2006, Saunders Elsevier.

8. VERIFYING THE EFFECT OF LEARNING

Code of the course effect of learning	Ways of verifying the effect of learning	Completion criterion
e.g. G.K1, G.S1, K1	<i>This field defines the methods used for grading students e.g. pop quiz, test, written report etc.</i>	e.g. threshold number of points
G.K1-G.K9, G.S1-G.S3	Credit – single choice test (25 questions)	GRADE CRITERIA: <ul style="list-style-type: none"> • 2.0 (failed): below 15 points (below 60%)

		<ul style="list-style-type: none"> • 3.0 (satisfactory): points range from 15-17 • 3.5 (rather good): points range from 18-19 • 4.0 (good): points range from 20-22 • 4.5 (more than good): points range from 23-24 • 5.0 (very good): 25 points
--	--	---

9. ADDITIONAL INFORMATION (*information essential for the course instructor that are not included in the other part of the course syllabus e.g. if the course is related to scientific research, detailed description of, information about the Science Club*)

Classes are held from 8.30 am to 12.15 pm in the Lindleya campus.

2. The student should become familiar with the curriculum, which is located in the seminar room and on the unit's website.

3. The student's presence at all classes is obligatory.

4. The student is required to change shoes, have an apron and a stethoscope.

5. For practical classes (in hospital wards and in the diagnostic laboratory), students go to building No. 1 under the supervision of a teacher or on their own after prior arrangement.

6. Only healthy students may participate in practical classes.

7. The final test takes place on Fridays during the last hour of classes.

8. If the student fails the test, the student should contact the course coordinator (beata.kaleta@wum.edu.pl) as soon as possible to arrange the date of the retake test.

9. If a student wants to change the dean's group (eg. to do their homework with another group), it is possible only if the group does not exceed 24 people. Such changes must be agreed in advance with the class coordinator.

10. Teaching consultations - after prior appointment with the Head of the Unit: <radoslaw.zagozdzon (at) wum.edu.pl>

Medical University of Warsaw has property rights, including copyright, to the syllabus. The syllabus may be used for educational purposes at the MUW only. Using of the syllabus for other purposes requires consent of the MUW.

ATTENTION

The final 10 minutes of the last class in the block/semester/year should be allocated to students' Survey of Evaluation of Classes and Academic Teachers.



Family medicine with elements of geriatrics

1. IMPRINT

Academic Year	2023/2024
Department	Faculty of Medicine
Field of study	Medicine
Main scientific discipline	Medical Science
Study Profile	General academic
Level of studies	uniform MSc
Form of studies	Full time studies
Type of module / course	Obligatory
Form of verification of learning outcomes	Completion
Educational Unit / Educational Units	Department of Family Medicine (1MH), MUW 6 Binieckiego Street, 02-097 Warsaw 4th floor, rooms: 5.52, 5.53, 5.54 (University Dentistry Center) Phone: +48 22 116 62 32
Head of Educational Unit / Heads of Educational Units	Życińska Katarzyna MD, PhD, Prof. katarzyna.zycinska@wum.edu.pl
Course coordinator	Życińska Katarzyna MD, PhD, Prof. katarzyna.zycinska@wum.edu.pl Puchala Mateusz MD, PhD, family.medicine@wum.edu.pl
Person responsible for syllabus	Życińska Katarzyna MD, PhD, Prof. katarzyna.zycinska@wum.edu.pl
Teachers	Durajski Łukasz MD Gałczyński Adam MD Górecki-Gomoła Adam MD Jakubczyk Karolina MD Kalisz Marcin MD Kowalik Jolanta PhD Puchala Mateusz MD. PhD

	<p>Radziwiłł Aleksandra MD Szydłarska Dorota MD, PhD Whiteman Monika PhD Zielonka Maria Tadeusz MD, PhD, associate Prof. Zwolińska Ewa MD, PhD Życińska Katarzyna MD, PhD, Prof.</p> <p>Practical classes: MUW group Biovena Health Centre group Orlik Health Centre group Jutro Medical Health Centre group</p>
--	--

2. BASIC INFORMATION

Year and semester of studies	IV year, 8 semester (summer)		Number of ECTS credits	2.00
FORMS OF CLASSES		Number of hours	ECTS credits calculation	
Contacting hours with academic teacher				
Lecture (L)				
Seminar (S)		30	1,5	
Discussions (D)		10	0,5	
e-learning (e-L)				
Practical classes (PC)				
Work placement (WP)				
Unassisted student's work				
Preparation for classes and completions				

3. COURSE OBJECTIVES

O1	Present basic knowledge on the organization of primary care and practical aspects of simple procedures. Students discuss the principles of family doctor's cooperation with a specialist doctor and pre-and post-hospital care.
O2	The most common conditions in primary care (treat a wide range of medical conditions and injuries for patients of all ages, genders, and states of health).
O3	Medical consultation and communication with the patients as family doctor/general practitioner.

4. STANDARDS OF LEARNING – DETAILED DESCRIPTION OF EFFECTS OF LEARNING

Code and number of the effect of learning in accordance with standards of learning	Effects in the field of: <i>(in accordance with appendix to the Regulation of Minister of Science and Higher education from 26th of July 2019)</i>
---	---

Knowledge – Graduate* knows and understands:

G.K1	E.W2 rules of nutrition of healthy and sick children, protective vaccinations and routine children's health checks
G.K2	E.W7 reasons, symptoms, diagnostic and treatment procedures of the most frequent internal diseases and their complications in adult patients: <ol style="list-style-type: none"> 1) circulatory system diseases, including coronary heart disease, heart defects, endocardium disease, cardiomyopathy, pericardium diseases, cardiac failure (acute and chronic), artery and vein diseases, hypertension: essential and secondary, pulmonary hypertension, 2) respiratory system diseases, including respiratory tract diseases, chronic obstructive pulmonary disease, bronchial asthma, bronchiectasis, cystic fibrosis, respiratory system infections, interstitial lung diseases, pleural diseases, mediastinal disorders, obstructive and central sleep apnoea, respiratory failure (acute and chronic), respiratory system cancers, 3) rheumatic diseases, including systemic diseases of connective tissue, systemic vasculitis, arthritis with the involvement of the spine, bone metabolic diseases, in particular osteoporosis and osteoarthritis, gout, 4) water-electrolytic disturbances and acid-base disturbances, dehydration, hyperhydration, electrolyte imbalance, acidosis and alkalosis;
G.K3	E.W8. course and symptoms of the process of aging, as well as the rules of the general geriatric assessment and the interdisciplinary care of elderly patients;
G.K4	E.W9. causes and basic distinctions of the most frequent diseases of elderly people, as well as the procedure in basic geriatric syndromes;
G.K5	E.W38. causes, symptoms, diagnosis and treatment of the most common diseases and the specific problems in the family practice.

Skills– Graduate* is able to:

G.S1	E.U1. collect medical history from adult patients;
G.S2	E.U2. collect medical history from a child and its family;
G.S3	E.U3. conduct a complete and targeted physical examination in adults;
G.S4	E.U4. conduct a physical examination of children of any age;
G.S5	E.U12. perform the differential diagnosis of the most common diseases in adults and children;
G.S6	E.U16. plan diagnostic, therapeutic and preventive treatment;

G.S7	E.U20. qualify patients for home and hospital treatment;
G.S8	E.U24. interpret laboratory test results with the identification of reasons for deviation;
G.S9	E.U27. qualify a patient for vaccinations;
G.S10	E.U29. perform the basic medical procedures, including: 1) body temperature measurement, pulse count and non-invasive blood pressure check, 2) standard resting electrocardiogram with adequate interpretation, electrical cardioversion and defibrillation, simple strip test and blood glucose check;
G.S11	E.U32. plan specialist consultations.

* In appendix to the Regulation of Minister of Science and Higher education from 26th of July 2019 „graduate”, not student is mentioned.

5. ADDITIONAL EFFECTS OF LEARNING (non-compulsory)	
Number of effect of learning	Effects in the fields of:
Knowledge – Graduate knows and understands:	
K1	K.S3 Student respects medical confidentiality and patient's rights
Skills– Graduate is able to:	
S1	K.S2 Student is guided by the good of the patients, putting them in the foreground.
Social Competencies – Graduate is ready for:	
SC1	K.S1 Able to establish and maintain a deep and respectful contact with the patient.

6. CLASSES		
Form of class	Class contents	Effects of Learning
Seminar (S)	S1. Respiratory infections and rational antibiotic therapy in out-patients practice. S2. Obesity – diagnosis and treatment. S3. Hypothyroidism in GP. S4. Problems of elderly care. S5. Emergency in obstetrics. S6. Rheumatic diseases in the elderly. S7. Vaccination programme in Poland. S8. Principles of family medicine. S9. Aspects of early psychological development of children and early diagnosis of those problems in GP practice. S10. Working with teenagers in GP practice. S11. Psychological diagnosis of senior patients in GP practice.	G.K1 – G.K.4; K1; S1; SC1
Practical classes (PC)	C1-12. Practical classes in family doctor's clinic – 2 meetings.	G.S1 - G.S11; K1; S1; SC1

e-learning (e-L)	E-learning course and asynchronous learning in online education via e-learning.wum.edu.pl and Microsoft Teams.	G.K1 – G.K.4; G.S1 - G.S11; K1; S1; SC1
------------------	--	---

7. LITERATURE

Obligatory

Textbook of Family Medicine. Author: Robert and David P. Rakel. Ninth Edition. Elsevier 2015.

Supplementary

8. VERIFYING THE EFFECT OF LEARNING

Code of the course effect of learning	Ways of verifying the effect of learning	Completion criterion
<i>e.g. G.K1, G.S1, K1</i>	<i>This field defines the methods used for grading students e.g. pop quiz, test, written report etc.</i>	<i>e.g. threshold number of points</i>
G.K1 – G.K.4; G.S1 - G.S11; K1; S1; SC1	1. Complete the entire course and attendance at all classes. 2. Colloquium (10 questions) SCQ test.	60%

9. ADDITIONAL INFORMATION

Regulations for students during classes at the Department of Family Medicine

- The student is obliged to read the syllabus <https://ed.wum.edu.pl/students/curriculum/curriculum/> and time-table on the website www.medycynarodzinna.wum.edu.pl -> English Division -> 4 year.
- Seminars start at 3.00 p.m. on Mondays and Tuesdays. If any changes occur - remember point 1.
- The students participate in classes (seminars and practice) **only with their Dean's group**. Possible group change is allowed in exceptional, justified situations and requires individual approval of course coordinator (according to MUW Regulations) – family.medicine@wum.edu.pl.
- The student must complete the entire course - all seminars and practical classes. Any absence requires working off - absence is acceptable.
- The student is obliged to follow the Medical University of Warsaw Regulations (available on the University's website).
- During classes with patients, students keep seriousness and silence.
- Meals and drinks should be consumed during breaks.
- Attendance card should be returned to secretariat no longer than a week after the end of classes.
- The student should obtain credit for family medicine in the plan of study, but no later than 2 weeks after the end of the course.
- The person responsible for students' affairs: **Mateusz Puchala MD, PhD** family.medicine@wum.edu.pl

ATTENTION!

Please ensure about the form and location of classes on the website www.medycynarodzinna.wum.edu.pl -> English Division -> English Division – 4 year.

Medical University of Warsaw has property rights, including copyright, to the syllabus. The syllabus may be used for educational purposes at the MUW only. Using of the syllabus for other purposes requires consent of the MUW.

ATTENTION

The final 10 minutes of the last class in the block/semester/year should be allocated to students' Survey of Evaluation of Classes and Academic Teachers.



Pediatric Pulmonology and Allergology

1. IMPRINT	
Academic Year	2023/2024
Department	Faculty of Medicine
Field of study	Medicine
Main scientific discipline	Medical Sciences
Study Profile	General Academic
Level of studies	Uniform MSc
Form of studies	Full time studies
Type of module / course	Obligatory
Form of verification of learning outcomes	Completion
Educational Unit / Educational Units	Department of Pediatric Pulmonology and Allergology, Medical University of Warsaw 63a Zwirki i Wigury St., 02-091 Warsaw (Pediatric Hospital) Tel. o. 22 317-94-19 e-mail: alergologia.dsk@uckwum.pl
Head of Educational Unit / Heads of Educational Units	Marek Kulus, M.D., PhD., Professor
Course coordinator	Honorata Marczak MD, PhD e-mail: honorata.marczak@wum.edu.pl Klementyna Łyżwa MD e-mail: klementyna.iozwik@gmail.com
Person responsible for syllabus	Honorata Marczak MD PhD, Klementyna Łyżwa MD
Teachers	Marek Kulus MD, PhD, Professor Katarzyna Krenke MD, PhD, Professor Wojciech Feleszko MD, PhD, Associate Professor Joanna Lange MD, PhD Witold Bartosiewicz MD, PhD Honorata Marczak MD, PhD Klementyna Łyżwa MD

	Aleksander Adamiec MD Alicja Krejner-Bienias MD, PhD Stanisław Bogusławski MD Kacper Gajko MD Agnieszka Strzelak MD, PhD Marcin Sanocki MD Karolina Dumycz MD Aleksandra Ratajczak MD
--	--

2. BASIC INFORMATION				
Year and semester of studies	IV year, 8 semester		Number of ECTS credits	2.00
FORMS OF CLASSES		Number of hours	ECTS credits calculation	
Contacting hours with academic teacher				
Lecture (L)		-		
Seminar (S)		10	0.8	
Discussions (D)		15	1.2	
e-learning (e-L)		-	-	
Practical classes (PC)		-	-	
Work placement (WP)		-	-	
Unassisted student's work				
Preparation for classes and completions		-	-	

3. COURSE OBJECTIVES	
O1	Knowledge of basic clinical topics in the field of pediatric pulmonology and allergology including anaphylaxis, food allergy, allergic rhinitis, atopic dermatitis, pneumonia, bronchiolitis, bronchitis, laryngitis, tuberculosis, asthma management, acute and chronic cough, cystic fibrosis, primary ciliary dyskinesia and other rare diseases in pulmonology.
O2	Evaluation of different lung imagining techniques results (e.g. chest X-ray, lung ultrasound, some aspects of CT scan evaluation).
O3	Practical ability to demonstrate techniques of inhalation from different inhalation drug delivery devices, evaluate skin prick and functional lung tests results.

4. STANDARDS OF LEARNING – DETAILED DESCRIPTION OF EFFECTS OF LEARNING

Code and number of effect of learning in accordance with standards of learning	Effects in the field of: <i>(in accordance with appendix to the Regulation of Minister of Science and Higher education from 26th of July 2019)</i>
---	---

Knowledge – Graduate* knows and understands:

E.W.3 p. 3	Causes, symptoms, principles of diagnosis and therapeutic treatment of the most common diseases in children: 3) acute and chronic diseases of the upper and lower respiratory tract, congenital defects of the respiratory tract, tuberculosis, cystic fibrosis, asthma, allergic rhinitis, urticaria, anaphylactic shock, angioedema,
E.W.3 p. 9	Causes, symptoms, principles of diagnosis and therapeutic treatment of the most common diseases in children: 9) the most frequent infectious diseases in childhood,
E.W.6	Management in case of life-threatening conditions related to the respiratory tract in children.
G.W3	Epidemiology of infectious and chronic diseases, methods of prevention at different stages of the disease natural history and the roles of epidemic surveillance;
D.W5	Rules and methods of communication with patients and their family that contribute to development of an empathic relationship, based on trust;

Skills– Graduate* is able to:

E.U2	Take medical history.
E.U4	Perform a proper physical examination of a child.
E.U7	Evaluate general condition and consciousness.
E.U12	Perform differential diagnostics of common diseases in children.
E.U13	Evaluate the psychical and somatic status of the patient.
E.U14	Recognize emergency symptoms.
E.U16	Plan diagnostics, therapy, and prophylaxis of common diseases.
E.U24	Interpret laboratory tests and identify the causes of abnormal results.
E.U29 p. 1,2,3	Perform basic diagnostic procedures including e.g. spirometry, oxygen therapy, and skin prick tests.

* In appendix to the Regulation of Minister of Science and Higher education from 26th of July 2019 „graduate”, not student is mentioned.

5. ADDITIONAL EFFECTS OF LEARNING (non-compulsory)

Number of effect of learning	Effects in the fields of:
-------------------------------------	----------------------------------

Knowledge – Graduate knows and understands:

F.W10	Imaging techniques used for diagnostics of different diseases including the basic interpretation of chest X-ray and lung ultrasound results.
Skills– Graduate is able to:	
S1	Plan aerosol therapy, instruct the patient on the technique of usage of different types of inhalers
Social Competencies – Graduate is ready for:	
III 1.1.3	Proper communication and contact with patient and care givers, confirming physical- patient privilege. To use objective sources of medical knowledge, to make conclusions from medical data.

6. CLASSES		
Form of class	Class contents	Effects of Learning
Seminars (S)	S1 - Asthma in children S2 - Pneumonia S3 - Tuberculosis S4 - Cystic fibrosis. Primary ciliary dyskinesia. S5 - Rare diseases in pulmonology. S6 - Food allergy. Atopic dermatitis. Acute urticaria. S7 - Bronchitis. Bronchiolitis. Infections of the respiratory tract. S8 - Anaphylaxis. S9 - Symptomatology in respiratory tract diseases. S10 - Emergencies in pediatric pulmonology.	E.W3, E.W6, G.W3
Classes (C)	Training of practical issues connected with taking history, signs and symptoms assessment as well as diagnosis in pediatric pulmonology and allergology.	E.W3, E.W6, G.W3, D.W5 E.U2, E.U4, E.U7, E.U12, E.U13, E.U14, E.U16, E.U24, E.U29, S1, III 1.1.3

7. LITERATURE
Obligatory
Illustrated Textbook of Paediatrics. Lissauer T, Clayden G, Mosby, 4 th edition, Presentations from seminars
Supplementary
Nelson Textbook of Pediatrics. Kliegman RM, Stanton BMD, 20 th edition GINA 2023 (www.ginasthma.org); BTS pneumonia guidelines

8. VERIFYING THE EFFECT OF LEARNING		
Code of the course effect of learning	Ways of verifying the effect of learning	Completion criterion
E.W3, E.W6, E.U2, E.U4, E.U7, E.U12, E.U13, E.U14, E.U16,	Active participation in seminars, and practical classes	Attendance

E.U24, E.U29, S1, III 1.1.3, G.W3, D.W5																
E.W3, E.W6,, G.W3	Test	<table><tr><td>Mark</td><td>% of points</td></tr><tr><td>2.0 (failed)</td><td><60%</td></tr><tr><td>3.0 (satisfactory)</td><td>61-68%</td></tr><tr><td>3.5 (rather good)</td><td>69-76%</td></tr><tr><td>4.0 (good)</td><td>77-84%</td></tr><tr><td>4.5 (more than good)</td><td>85-92%</td></tr><tr><td>5.0 (very good)</td><td>93-100%</td></tr></table>	Mark	% of points	2.0 (failed)	<60%	3.0 (satisfactory)	61-68%	3.5 (rather good)	69-76%	4.0 (good)	77-84%	4.5 (more than good)	85-92%	5.0 (very good)	93-100%
Mark	% of points															
2.0 (failed)	<60%															
3.0 (satisfactory)	61-68%															
3.5 (rather good)	69-76%															
4.0 (good)	77-84%															
4.5 (more than good)	85-92%															
5.0 (very good)	93-100%															

9. ADDITIONAL INFORMATION

Seminars and practical classes are held in the Department of Pediatric Pulmonology and Allergology (Children's Hospital, ul. Żwirki i Wigury 63A, second floor, part 2D, seminar room 2D.002.). Classes start at 8.15. We do not accept late students!

Students should be prepared for the practical classes: changed shoes, scrubs/aprons, stethoscopes, short nails, no nail polish, no rings, or other jewelry types.

Medical University of Warsaw has property rights, including copyright, to the syllabus. The syllabus may be used for educational purposes at the MUW only. Using of the syllabus for other purposes requires consent of the MUW.

ATTENTION

The final 10 minutes of the last class in the block/semester/year should be allocated to students' Survey of Evaluation of Classes and Academic Teachers.



Pediatric gastroenterology

1. IMPRINT

Academic Year	2023/2024
Department	Faculty of Medicine
Field of study	Medicine
Main scientific discipline	Medical Science
Study Profile	General academic
Level of studies	uniform MSc
Form of studies	Full time studies
Type of module / course	Obligatory
Form of verification of learning outcomes	Credit
Educational Unit / Educational Units	Department of Pediatric Gastroenterology and Nutrition (1W33), Medical University of Warsaw Żwirki i Wigury 63a street ., 02-091 Warsaw, Phone: 22 3179451, e-mail: gastroenterologia.dsk@uckwum.pl
Head of Educational Unit / Heads of Educational Units	Professor Aleksandra Banaszkiewicz
Course coordinator	Katarzyna Karolewska-Bochenek MD, PhD, e-mail: Katarzyna.bochenek@wum.edu.pl
Person responsible for syllabus	Katarzyna Karolewska-Bochenek MD, PhD, e-mail: Katarzyna.bochenek@wum.edu.pl
Teachers	Andrzej Radzikowski MD, PhD Aleksandra Banaszkiewicz MD, PhD Katarzyna Karolewska-Bochenek MD, PhD Barbara Skowrońska MD Katarzyna Parcińska MD Marcin Dziekiewicz MD, PhD Marcin Banasiuk MD, PhD Jan Bukowski MD

2. BASIC INFORMATION			
Year and semester of studies	4 th year, 2 nd semester	Number of ECTS credits	2.00
FORMS OF CLASSES	Number of hours	ECTS credits calculation	
Contacting hours with academic teacher			
Lecture (L)			
Seminar (S)	10	0.4	
Discussions (D)	15	0.6	
e-learning (e-L)			
Practical classes (PC)			
Work placement (WP)			
Unassisted student's work			
Preparation for classes and completions	30	1.00	

3. COURSE OBJECTIVES	
O1	Constipation, inflammatory bowel disease, acute and chronic pancreatitis
O2	Practical abilities in patient's examination, differential diagnosis of gastrointestinal diseases, interpretation of results of tests and treatment
O3	Professional communication with the patient and care givers

4. STANDARDS OF LEARNING – DETAILED DESCRIPTION OF EFFECTS OF LEARNING	
Code and number of the effect of learning in accordance with standards of learning	Effects in the field of: <i>(in accordance with appendix to the Regulation of Minister of Science and Higher education from 26th of July 2019)</i>
Knowledge – Graduate* knows and understands:	
E.W3 p. 5	<i>Environmental and epidemiological factors of the most common disorders of GI tract in children. Aetiology, signs, symptoms, diagnosis and treatment of chronic diarrhoea, abdominal pain, dehydration, liver diseases, inflammatory bowel disease</i>
E.W2	rules of nutrition of healthy and sick children, protective vaccinations and routine children's health checks
E.W6	the most common life threatening conditions in children and the management of these conditions

Skills– Graduate* is able to:

E.U2	Collect medical history from a child and its family
E.U4	Perform proper physical examination of a child at any age
E.U7	Evaluate general condition and consciousness
E.U12	Perform differential diagnosis of common disease in children
E.U14	Recognize emergency symptoms
E.U16	Plan diagnostics, therapy and prophylaxis of common diseases

* In appendix to the Regulation of Minister of Science and Higher education from 26th of July 2019 „graduate”, not student is mentioned.

5. ADDITIONAL EFFECTS OF LEARNING (non-compulsory)

Number of effect of learning	Effects in the fields of:
-------------------------------------	----------------------------------

Knowledge – Graduate knows and understands:

.FW10	Interpret results and indications to basic imaging techniques of GI tract
-------	---

Skills– Graduate is able to:

S6	Prepare written medical certificates and opinion for patients
----	---

Social Competencies – Graduate is ready for:

III 1.1.3	Proper communication and contact with patient and care givers, confirming physical patient privilege. Use objective sources of medical knowledge, to make conclusions from medical data.
-----------	--

6. CLASSES

Form of class	Class contents	Effects of Learning
<i>Seminars</i>	<i>S1. Abdominal pain-functional abdominal pain</i> <i>S2..Diet therapy in GE diseases</i> <i>S3. Failure to thrive</i> <i>S4. Coeliac disease</i> <i>S5. Oesophageal diseases</i> <i>S6. Bleeding from GI tract</i> <i>S7. Constipation</i> <i>S8. Chronic diarrhoea</i> <i>S9. Acute & chronic pancreatitis</i> <i>S10. Liver diseases</i>	
<i>Practical classes</i>	<i>1. Examination of patients, interview with parents and children.</i> <i>2. Participation in ward rounds</i> <i>3. Planning and discussion of biochemical, radiological and other test</i> <i>4. Interpretation of test results</i>	

7. LITERATURE

Obligatory

Nelson Textbook of Pediatrics, WB Saunders Co, Philadelphia 2011
Current Diagnosis and Treatment Pediatrics 23rd edition
Illustrated textbook of Pediatrics, Lissauer T, Clayden G, Mosby 4th edition
Nelson Textbook of Pediatrics, Kliegman RM, Stanton BMD, 20th edition

Supplementary

Gastrointestinal System, 4th edition Crash Course, Megan Griffiths, Mosby 2015

8. VERIFYING THE EFFECT OF LEARNING

Code of the course effect of learning	Ways of verifying the effect of learning	Completion criterion
E.U2, E.U4, E.U7, E.U12, E.U14, E.U16	Active participation in seminars, bedside classes	80% presence of seminars and bedside classes
E.W3, E.W4, E.W7. III.3	Multiple Choice Questions test (4 th year)	Over 60% correct answers. <60% failed 61-69% satisfactory 70-75% rather good 76-84% good 85-94% more than good 95-100% very good

9. ADDITIONAL INFORMATION

- 1) Students are required to attend all classes.
- 2) Students should be prepared for the subject of the particular class.
- 3) Absence from class is justified on the basis of a medical certificate or certificate of a random accident. The class should be done with another group after prior agreement with the person responsible for the subject.
- 4) Classes start on time, being late is treated as an absence (students are not allowed to enter the room).
- 5) Students should have the workbook "Gastroenterologia dziecięca" - available for purchase at the WUM Publishing House (Oficyna Wydawnicza WUM, ul. Pawińskiego 3, 02-106 Warszawa).
- 6) Students should wear a lab coat and a lab gloves.
- 7) Persons applying for transfer of the subject from previous years or from another university should write an application to the Head of the Department of Pediatric Gastroenterology and Nutrition and obtain permission of the Dean.

Medical University of Warsaw has property rights, including copyright, to the syllabus. The syllabus may be used for educational purposes at the MUW only. Using of the syllabus for other purposes requires consent of the MUW.

ATTENTION

The final 10 minutes of the last class in the block/semester/year should be allocated to students' Survey of Evaluation of Classes and Academic Teachers.



Pediatrics Endocrinology

1. IMPRINT

Academic Year	2023/2024
Department	Faculty of Medicine
Field of study	Medicine
Main scientific discipline	Medical science
Study Profile	General academic
Level of studies	Uniform MSc
Form of studies	Full time studies
Type of module / course	obligatory
Form of verification of learning outcomes	Credit
Educational Unit / Educational Units	Department of Paediatrics and Endocrinology; 02-091 Warszawa, 63a Żwirki i Wigury St., endokrynologia.dsk@uckwum.pl
Head of Educational Unit / Heads of Educational Units	Professor Beata Pyrżak MD PhD
Course coordinator	Dr hab. med. Anna Kucharska, tel. 22 3179564, ankucharska@wum.edu.pl
Person responsible for syllabus	Dr hab. med. Anna Kucharska , ankucharska@wum.edu.pl

Teachers	Prof. Beata Pyrżak MD PhD, Anna Kucharska MD PhD, Maria Krajewska MD, Ada Borowiec MD, Michał Erazmus MD, Katarzyna Kądziela MD PhD.
-----------------	--

2. BASIC INFORMATION			
Year and semester of studies	4 th year, summer and winter semester	Number of ECTS credits	2.00
FORMS OF CLASSES		Number of hours	ECTS credits calculation
Contacting hours with academic teacher			
Lecture (L)		-	
Seminar (S)		10	1.00
Classes (C)		15	1.00
e-learning (e-L)			
Practical classes (PC)			
Work placement (WP)			
Unassisted student's work			
Preparation for classes and completions			

3. COURSE OBJECTIVES	
O1	Basic knowledge of paediatric endocrinology: hypothalamo- pituitary disorders (diabetes insipidus, pituitary insufficiencies, Cushing disease), thyroid diseases, adrenal dysfunction in children, disorders of puberty and sex development, diabetes mellitus, diabetic ketoacidosis.
O2	Practical abilities in medical history obtaining and physical examination of patients
O3	Profesional communication with the patient and care givers

4. STANDARDS OF LEARNING – DETAILED DESCRIPTION OF EFFECTS OF LEARNING (concerns fields of study regulated by the Regulation of Minister of Science and Higher Education from 26 of July 2019; does not apply to other fields of study)	
Code and number of effect of learning in accordance with standards of learning	Effects in the field of: <i>(in accordance with appendix to the Regulation of Minister of Science and Higher education from 26th of July 2019)</i>
Knowledge – Graduate* knows and understands:	
E.W1	Environmental and epidemiological aspects of the most often seen diseases in paediatric endocrinology Physiology of normal human development: physiology of growth and sexual maturation Physiology of endocrine glands function in neonatal period

E.W3	Aetiology, signs, symptoms, diagnosis and treatment of congenital and acquired hypothyroidism Knowledge of the diagnostics of growth disorders: short stature and tall stature; hypercortisolism in children; diabetic ketoacidosis; congenital adrenal hypertrophy in children; precocious and delayed puberty; knowledge of causes, investigation and treatment in disorders of sex development
E.W6	The management of most often emergencies in paediatric endocrinology
Skills– Graduate* is able to:	
E.U2	Obtain medical history
E.U4	Make the proper physical examination in a child at any age
E.U7	evaluate the general condition and consciousness
E.U9	compare the anthropometric data and BP with percentile charts
E.U10	Evaluate the advancement of secondary sex characteristics
E.U11	Perform the well-child care
E.U12	Perform the differential diagnosis of common diseases in children
E.U13	Evaluate psychical and somatic status of the patient
E.U14	Recognize emergency symptoms
E.U16	Organize diagnostics, therapy and prophylaxis of common endocrine diseases
E.U24	Interpret lab tests and identify the causes of abnormal results in endocrinology
E.U38	Make proper patient's documentation

* In appendix to the Regulation of Minister of Science and Higher education from 26th of July 2019 „graduate”, not student is mentioned.

5. ADDITIONAL EFFECTS OF LEARNING (non-compulsory)	
Number of effect of learning	Effects in the fields of:
Knowledge – Graduate knows and understands:	
G.W8	Legal regulation, methods of medical experiments, conduction of medical experiments s and the basic methods of data analysis
G.W17	Is able to identify medical malpractice, its most common causes, and how to evaluate it
Skills– Graduate is able to:	
G.U2	Obtain information about risk factors of chronic diseases and know how to prevent it on variable level of prevention
G.U6	Prepare the written medical certificates and opinion for patients

Social Competencies – Graduate is ready for:	
III 1.1.3	Proper communication and contact with patient and care givers, confirming physical- patient privilege, To use objective sources of medical knowledge, to make proper conclusions from medical data.

6. CLASSES		
Form of class	Class contents	Effects of Learning
Seminars	Thyroid diseases in children Congenital Adrenal Hyperplasia Precocious puberty Delayed puberty Diabetes mellitus in children Diabetic ketoacidosis- management in children Hypothalamo- pituitary disorders in children Disorders of Sex Differentiation Short stature – causes, diagnostics, management. Cushing syndrome in children.	
Bed-side classes	Practical exercises in 4-5 person groups	

7. LITERATURE
Obligatory
<ol style="list-style-type: none"> 1. Greenspan's Basic and Clinical Endocrinology., By Gardner , LANGE 9th ed - 2015, 10th ed. -2018 2. Nelson Essentials of Pediatrics. Marcdante KJ, Kliegman RM, Elsevier Saunders, 7th edition 3. Bate's Guide to Physical Examination & History Taking, Bickley LS, Lippincott Williams & Wilkins, 12th edition
Supplementary
<ol style="list-style-type: none"> 1. Paediatric Clinical Examination Made Easy Gill D, O'Brien N, Churchill Livingstone, 5th edition 2. Illustrated Textbook of Paediatrics, Lissauer T, Clayden G, Mosby, 4th edition. 3. The Harriet Lane Handbook. A Manual for Pediatric House Officers. Custer JW, Rau RE, 18th edition 4. Manual of Pediatric Therapeutics. Graef JW, Lipincot Raven 6th edition 5. Nelson Textbook of Pediatrics. Kliegman RM, Stanton BMD, Elsevier Saunders 19th edition.

8. VERIFYING THE EFFECT OF LEARNING		
Code of the course effect of learning	Ways of verifying the effect of learning	Completion criterion

E.W1, E.W3,E.W6	Final test – 20 questions	At least 12 points (12/20)
E.U2, E.U4,E.U7, E.U9-14, E.U16, E.U24, E.U38	COMPLETION OF PRACTICAL CLASSES, EVALUATION OF INDIVIDUAL STUDENT'S ACTIVITY DURING BED-SIDE CLASSES	Evaluation by tutor teacher

9. ADDITIONAL INFORMATION (*information essential for the course instructor that are not included in the other part of the course syllabus e.g. if the course is related to scientific research, detailed description of, information about the Science Club*)

Students are required to attend all classes.

Students should be prepared for the subject of particular class and seminars.

Absence from classes is justified on the basis of a medical certificate of a random accident, the class should be done with another group after prior agreement with the course coordinator.

Classes start on time, being late can be treated as an absence.

Students should wear medical coat and shoes .

Medical University of Warsaw has property rights, including copyright, to the syllabus. The syllabus may be used for educational purposes at the MUW only. Using of the syllabus for other purposes requires consent of the MUW.

ATTENTION

The final 10 minutes of the last class in the block/semester/year should be allocated to students' Survey of Evaluation of Classes and Academic Teachers.



Psychiatry

1. IMPRINT

Academic Year	2023/2024
Department	Faculty of Medicine
Field of study	Medicine
Main scientific discipline	Medical science
Study Profile	General academic
Level of studies	Uniform MSC
Form of studies	Full time studies
Type of module / course	Obligatory
Form of verification of learning outcomes	Credit
Educational Unit / Educational Units	II Klinika Psychiatryczna / II Department of Psychiatry ul. Kondratowicza 8, 03-242 Warszawa phone: (+48 22) 326 58 92; e-mail: psychiatria@brodnowski.pl
Head of Educational Unit / Heads of Educational Units	Prof. dr. hab. med. Andrzej Kokoszka
Course coordinator	Dr Marcin Obrębski Mail: mobrebski@wum.edu.pl

Person responsible for syllabus	Prof. dr. hab. med. Andrzej Kokoszka Mail: andrzej.kokoszka@wum.edu.pl
Teachers	Prof. dr hab. med. Andrzej Kokoszka Dr n. med. Aleksandra Jodko-Modlińska Dr n. o zdr. Marcin Obrębski Lek. med. Magdalena Grusiecka-Stańczyk Lek. med. Joanna Mikulska Lek. med. Wiktor Buczek Lek. Natalia Chłopecka Lek. Sebastian Koterwa Lek. Matija Mitric Lek. Radosław Napora Lek. Natalia Olejnik Lek. Sasza Rychlica Lek. Mikołaj Rejewski Lek. Przemysław Gałązka Lek. Joanna Szczerba Mgr Monika Gawłowicz Mgr Joanna Kielan Mgr Joanna Miś Mgr Renata Pionke Mgr Karolina Ciesielka Mgr Agnieszka Twarowska

2. BASIC INFORMATION

Year and semester of studies	IV year VII &VIII semester		Number of ECTS credits	4.00
FORMS OF CLASSES		Number of hours	ECTS credits calculation	
Contacting hours with academic teacher				
Lecture (L)		0	0	
Seminar (S)		30	1.5	
Classes (C)		30	1.5	
e-learning (e-L)		0	0	
Practical classes (PC)		0	0	
Work placement (WP)		0	0	
Unassisted student's work				
Preparation for classes and completions		60	1	

3. COURSE OBJECTIVES

O1	History of psychiatry
----	-----------------------

O2	Bio-psycho-social aspects of mental disorders
O3	General psychopathology
O4	Legal aspects of psychiatry
O5	Classifications of mental disorders
O6	Diagnostic methods in psychiatry
O7	Biological and psychosocial methods of treatment
O8	To acquire skills of mental state assessment
O9	Emergency and preliminary therapeutic management in mental disorders

4. STANDARDS OF LEARNING – DETAILED DESCRIPTION OF EFFECTS OF LEARNING (*concerns fields of study regulated by the Regulation of Minister of Science and Higher Education from 26 of July 2019; does not apply to other fields of study*)

Code and number of effect of learning in accordance with standards of learning	Effects in the field of: (<i>in accordance with appendix to the Regulation of Minister of Science and Higher education from 26th of July 2019</i>)
---	---

Knowledge – Graduate* knows and understands:

E.W1.	knows the environmental and epidemiological determinants of the most common mental illnesses
E.W10.	knows and understands the basic principles of pharmacotherapy in the elderly
E.W11.	knows and understands the risks associated with hospitalization of the elderly
E.W12.	knows and understands the basic principles of organizing elderly care as well as the burdens of being a caregiver for an elderly person
E.W15.	knows the basic concepts in the pathogenesis of mental disorders
E.W16.	knows the general psychiatric symptomatology and the principles of classifying mental disorders according to the main classification systems
E.W17.	knows the symptoms as well as principles of diagnosis and therapeutic treatment of the most common mental illnesses, including: a) schizophrenia b) affective and adaptive disorders c) eating disorders d) disorders associated with the use of psychoactive substances
E.W18.	knows the principles of diagnosis of and procedure for dealing with psychiatric emergencies
E.W19.	knows the characteristics of mental disorders and of treating these disorders in old age
E.W20.	knows the symptoms of mental disorders in the course of somatic diseases and their impact on the course of the underlying disease as well as the prognosis and principles of treating these disorders
E.W21.	has knowledge of human sexuality and of the basic disorders associated with it
E.W22.	is familiar with provisions relating to mental health care; with particular emphasis on the rules of admission to psychiatric hospitals

E.W38	is familiar with the theoretical and practical fundamentals of laboratory diagnosis in psychiatry
E.W39.	knows and understands the capabilities and limitations of laboratory testing in psychiatric emergencies

Skills– Graduate* is able to:

E.U5.	carries out a psychiatric examination
E.U12.	performs a differential diagnosis of the most common mental illnesses in adults
E.U13.	assesses and describes the patient's somatic and psychological state
E.U14.	recognizes conditions that pose a direct threat to life in the course of mental disorders
E.U15.	recognizes states under the influence of alcohol, drugs and other stimulants
E.U16.	plans diagnostic, therapeutic and preventive procedures regarding mental disorders
E.U17.	analyzes the possible adverse effects of particular drugs and the interactions between them
E.U18.	proposes that existing therapeutic guidelines and other treatment methods be individualized if standard therapy is ineffective or contraindicated
E.U19.	recognizes the signs of drug dependency and proposes treatment
E.U20.	decides that a given patient is eligible for home or hospital treatment
E.U23.	proposes a rehabilitation program for the most common diseases
E.U24.	interprets the results of laboratory tests and identifies the causes of deviations
E.U32.	plans specialist consultations
E.U38.	keeps a patient's medical records

* In appendix to the Regulation of Minister of Science and Higher education from 26th of July 2019 „graduate”, not student is mentioned.

5. ADDITIONAL EFFECTS OF LEARNING (non-compulsory)

Number of effect of learning	Effects in the fields of:
------------------------------	---------------------------

Knowledge – Graduate knows and understands:

K1	Has a basic knowledge about different types of psychotherapy
K2	Understands the impact of psychological factors on patient adherence to recommended treatment

Skills– Graduate is able to:

S1	Establishes ethical and professional relations with patients suffering from mental disorders
S2	Increases patient motivation and adherence to treatment

Social Competencies – Graduate is ready for:

SC1	Presents diagnosis of a patient and discusses it with other students
-----	--

6. CLASSES

Form of class	Class contents	Effects of Learning
Seminar 1 (3 hours)	Introduction to psychiatry - history, biopsychosocial factors of mental disorders, epidemiology Psych. examination and general psychopathology – rules of mental state assessment and the main psychopathological symptoms	<i>E.W1, E.W18</i>
Seminar 2 (3 hours)	Personality Disorders	<i>E.W15, E.W16, E.W22</i>
Seminar 3 (3 hours)	Schizophrenia- Etiology, diagnosis, classification and treatment	<i>E.W15, E.W16, E.W17, E.W22</i>
Seminar 4 (3 hours)	Psychotherapy - the main approaches to psychotherapy. Theoretical foundations and effectiveness	<i>E.W17, E.W22</i>
Seminar 5 (3 hours)	Organic symptoms, Psychogeriatrics	<i>E.W10, E.W11, E.W12, E.W19</i>
Seminar 6 (3 hours)	Psychopharmacology and diagnostic methods – the rules medication and the laboratory diagnostic methods	<i>E.W38, E.W39</i>
Seminar 7 (3 hours)	Anxiety disorders I, Panic D. Fobias, GAD Etiology, diagnosis, classification and treatment	<i>E.W15, E.W16, E.W17, E.W22</i>
Seminar 8 (3 hours)	Depression & Mania Etiology, diagnosis, classification and treatment	<i>E.W15, E.W16, E.W17, E.W22</i>
Seminar 9 (3 hours)	Anxiety disorders II PTSD, OCD, Etiology, diagnosis, classification and treatment	<i>E.W15, E.W16, E.W17, E.W22</i>
Seminar 10 (3 hours)	Ethical issues – ethical rules of psychiatry Psychodiabetology – liaison psychiatry, psychiatric problems in the course medical condition	<i>E.W20</i>
Class 1 (3 hours)	Psych. examination and general psychopathology – clinical assessment of mental state	<i>E.U5,</i>
Class 2 (3 hours)	Personality Disorders	<i>E.U16, E.U18, E.U20</i>
Class 3 (3 hours)	Schizophrenia – management with patient	<i>E.U12-E.U23</i>
Class 4 (3 hours)	Psychotherapy – demonstration and discussion of psychotherapeutic methods	<i>E.U16, E.U18, E.U20</i>
Class 5 (3 hours)	Organic symptoms– management with patient Geriatric psychiatry– management with patient	<i>E.U12-E.U23</i>
Class 6 (3 hours)	Psychopharmacology– management with patient	<i>E.U17, E.U18</i>
Class 7 (3 hours)	Anxiety disorders I, Panic D. Fobias, GAD– management with patient	<i>E.U12-E.U23</i>

Classes 8 (3 hours)	Depression & Mania	E.U12-E.U23
Classes 9 (3 hours)	Anxiety disorders II PTSD, OCD, – management with patient	E.U12-E.U23
Classes 10 (3 hours)	Ethical issues – discussion of ethical dilemma examples Psychodiabetology – workshop on management with patients with dysfunctional coping style.	E.U14, E.U32, E.U38

7. LITERATURE

Obligatory

1. Sadock B.J., Sadock V.A. Ruitz P. Kaplan and Sadock's Synopsis of Psychiatry: Behavioral Sciences/Clinical Psychiatry. Wolters Kluwer, 2014

Supplementary

1. Cowen P., Harrison P., Burns T., Shorter Oxford Textbook of Psychiatry. Sixth Edition, 2012
2. Meyer, R. G., Chapman, L. K., and Weaver, C. M. Case Studies in Abnormal Behavior. 9th ed. 2012

8. VERIFYING THE EFFECT OF LEARNING

Code of the course effect of learning	Ways of verifying the effect of learning	Completion criterion
E.W1-E.W39	Colloquium – test on the last day of course, consisting of 20 single select multiple choice questions.	At least 60% of correct answers on test
E.U5-E.U38	Written description of mental states of two patients with different disorders presented during classes.	Accepted by the assistant

9. ADDITIONAL INFORMATION (information essential for the course instructor that are not included in the other part of the course syllabus e.g. if the course is related to scientific research, detailed description of, information about the Science Club)

Classes and seminars takes place at:

DREWNICA= Drewnica Hospital, - ul. Rychnińskiego 1, Żąbki, meeting at main entrance to the new building.

KONDRATOWICZA 8= Brodnowski Hospital, ul. Kondratowicza 8, Building G, 4th floor

SUWALSKA 11= Brodnowski Hospital, Daily Psychiatric Ward, ul. Suwalska 11

In case of epidemiological restrictions = ONLINE

The first seminar takes place in lecture hall in Brodnowski Hospital, ul. Kondratowicza 8, pawilon "G".

The detailed program of seminars and classes will be presented during the first seminar

Medical University of Warsaw has property rights, including copyright, to the syllabus. The syllabus may be used for educational purposes at the MUW only. Using of the syllabus for other purposes requires consent of the MUW.

ATTENTION

The final 10 minutes of the last class in the block/semester/year should be allocated to students' Survey of Evaluation of Classes and Academic Teachers.



Child Psychiatry

1. IMPRINT

Academic Year	2023/2024
Department	Faculty of Medicine
Field of study	Medicine
Main scientific discipline	Medical Sciences
Study Profile	General academic
Level of studies	Uniform MSc
Form of studies	Full-time studies
Type of module / course	Obligatory
Form of verification of learning outcomes	Credit
Educational Unit / Educational Units	Medical University of Warsaw, English Division of the 2 nd Faculty of Medicine Department of Child Psychiatry (2M7) Żwirki i Wigury 63a, 02-091 Warsaw phone: (+48 22) 317 92 51 fax.: (+48 22) 317 90 80 e-mail: psychiatria@spdsk.edu.pl
Head of Educational Unit / Heads of Educational Units	Prof. dr hab. n. med. Tomasz Wolańczyk
Course coordinator	MSc Łukasz Konowalek; lukasz.konowalek@wum.edu.pl

Person responsible for syllabus	MSc Łukasz Konowalek; lukasz.konowalek@wum.edu.pl
Teachers	Tomasz Srebnicki, MD PhD Łukasz Konowalek, MSc Anna Herman, MD Aleksandra Leszczyńska-Farhan, MD

2. BASIC INFORMATION

Year and semester of studies	IV, winter semester	Number of ECTS credits	1.00
FORMS OF CLASSES		Number of hours	ECTS credits calculation
Contacting hours with academic teacher			
Lecture (L)			
Seminar (S)		2	0.1
Classes (C)		18	0.9
e-learning (e-L)			
Practical classes (PC)			
Work placement (WP)			
Unassisted student's work			
Preparation for classes and completions			

3. COURSE OBJECTIVES

O1	To learn about clinical picture, etiology and causes of psychiatric disorders in children and adolescents.
O2	To learn to develop and implement treatment plans for children with psychiatric disorders.
O3	To learn about organization of psychiatric help in the light of current law regulations

4. STANDARDS OF LEARNING – DETAILED DESCRIPTION OF EFFECTS OF LEARNING (concerns fields of study regulated by the Regulation of Minister of Science and Higher Education from 26 of July 2019; does not apply to other fields of study)

Code and number of effect of learning in accordance with standards of learning	Effects in the field of: <i>(in accordance with appendix to the Regulation of Minister of Science and Higher education from 26th of July 2019)</i>
Knowledge – Graduate* knows and understands:	
G.K 1.	knows environmental and epidemiological conditions of the most common mental disorders in children and adolescents; E.W 1

G.K 2.	known issues: child maltreatment and sexual abuse, behavioral disorders: psychosis, eating disorders, and elimination disorders (enuresis, encopresis) in children; E.W 4
G.K 3.	knows the basic concepts of the pathogenesis of mental disorders in children and adolescents; E.W 15
G.K 4.	knows the general symptomatology of mental disorders in children and adolescents and the principles of their classification according to the main classification systems; E.W 16
G.K 5.	knows the symptoms, the principles of diagnosis and therapeutic treatment of the most common mental diseases, including: affective disorders, eating disorders; E.W 17 (2, 4)
G.K 6.	knows the characteristics of mental disorders and their treatment in children and adolescents; E.W 19
Skills– Graduate* is able to:	
G.S 1	performs psychiatric examination; E.U 5
G.S 2	evaluates and describes the mental state of the patient - a child and a teenager; E.U 13
G.S 3	plans diagnostic and therapeutic procedures and prophylactic in children and adolescents. E.U 16

* In appendix to the Regulation of Minister of Science and Higher education from 26th of July 2019 „graduate”, not student is mentioned.

5. ADDITIONAL EFFECTS OF LEARNING (non-compulsory)	
Number of effect of learning	Effects in the fields of:
Knowledge – Graduate knows and understands:	
K1	
Skills– Graduate is able to:	
S1	
Social Competencies – Graduate is ready for:	
SC1	

6. CLASSES		
Form of class	Class contents	Effects of Learning
Seminar 1.	Child and adolescent psychopathology, psychiatric assessment of children and adolescents;	G.K1, G.K4, G.K15, G.K16, G.K17, G.K19
Classes 1	Neurodevelopmental disorders: autism spectrum disorder, ADHD, tic disorders, specific learning disorders, intellectual disability; E.S.1.-E.S.3.	G.S5, G.S13, G.S15
Classes 2	Self-harm, suicide, personality disorders and mood disorders; E.S.1.-E.S.3.	G.S5,

		G.S13, G.S15
Classes 3	Eating disorders: anorexia nervosa, bulimia nervosa, binge eating disorder, avoidant-restrictive food disorder; E.S.1.-E.S.3.	G.S5, G.S13, G.S15
Classes 4	Externalizing disorders: oppositional-defiant disorder, conduct disorder, addictions; E.S.1.-E.S.3.	G.S5, G.S13, G.S15
Classes 5	Obsessive-compulsive disorders and anxiety disorders; E.S.1.-E.S.3.	G.S5, G.S13, G.S15

7. LITERATURE

Obligatory

1. Hoare P. „Essential Child Psychiatry”. Churchill Living Stone, Edinburgh, 1993
2. Graham P., Turk J., Ferhulst F.C. „Child Psychiatry”. Oxford University Press, NY, 1999.

Supplementary

1. Gillberg C. „Clinical Child Neuropsychiatry”. Cambridge University Press, 1995.
2. Lewis M (Ed). „Child and Adolescents Psychiatry. A Comprehensive Textbook”. Williams and Wilkins, Baltimore, 1996

8. VERIFYING THE EFFECT OF LEARNING

Code of the course effect of learning	Ways of verifying the effect of learning	Completion criterion
<i>e.g. G.K1, G.S1, K1</i>	<i>This field defines the methods used for grading students e.g. pop quiz, test, written report etc.</i>	<i>e.g. threshold number of points</i>
G.K1, G.K4, G.K15, G.K16, G.K17, G.K19	active participation and correct execution of tasks	attendance and active participation
G.S5, G.S13, G.S15	active participation and correct execution of tasks	attendance and active participation

9. ADDITIONAL INFORMATION (information essential for the course instructor that are not included in the other part of the course syllabus e.g. if the course is related to scientific research, detailed description of, information about the Science Club)

Seminar 1 and Practical classes 1 are conducted on-line (Monday, 9.00-12.45), Practical classes 2, 3, 4, 5 are conducted in a direct-contact form (Tuesday, Wednesday, Thursday, Friday; 9.00-11.15). The first meeting on Tuesday and the division into groups will be held in room 1DE (first floor).

Medical University of Warsaw has property rights, including copyright, to the syllabus. The syllabus may be used for educational purposes at the MUW only. Using of the syllabus for other purposes requires consent of the MUW.

ATTENTION

The final 10 minutes of the last class in the block/semester/year should be allocated to students' Survey of Evaluation of Classes and Academic Teachers.



Maxillofacial surgery

1. IMPRINT

Academic Year	2023/2024
Department	Faculty of Medicine
Field of study	Medicine
Main scientific discipline	Medical Science
Study Profile	General academic
Level of studies	Uniform MSc
Form of studies	Full time studies
Type of module / course	obligatory
Form of verification of learning outcomes	Credit
Educational Unit / Educational Units	Department of Cranio-Maxillofacial Surgery Oral Surgery and Implantology (WLS10), 02-005 Warsaw, 4 Lindleya St. phone: 48 22 502 17 97; e-mail: kcst@wum.edu.pl
Head of Educational Unit / Heads of Educational Units	Professor Paweł Zawadzki DDS, PhD
Course coordinator	Zygmunt Stopa, MD, PhD

Person responsible for syllabus	Zygmunt Stopa, MD, PhD
Teachers	Zygmunt Stopa, MD, PhD Piotr Momot, DDS Piotr Oczkowski, MD, DDS

2. BASIC INFORMATION

Year and semester of studies	4 th year (VI-years program), 7 and 8 st semester	Number of ECTS credits	1
FORMS OF CLASSES		Number of hours	ECTS credits calculation
Contacting hours with academic teacher			
Lecture (L)			
Seminar (S)		12	0,8
Classes (C)			
e-learning (e-L)			
Practical classes (PC)			
Work placement (WP)			
Unassisted student's work			
Preparation for classes and completions		6	0,2

3. COURSE OBJECTIVES

O1	The program of the course offers the basic information of the most frequent problems of Maxillofacial Surgery
O2	Students receive knowledge of basic diagnostic and therapeutic procedures in Maxillofacial Surgery

4. STANDARDS OF LEARNING – DETAILED DESCRIPTION OF EFFECTS OF LEARNING (concerns fields of study regulated by the Regulation of Minister of Science and Higher Education from 26 of July 2019; does not apply to other fields of study)

Code and number of effect of learning in accordance with standards of learning	Effects in the field of: (in accordance with appendix to the Regulation of Minister of Science and Higher education from 26th of July 2019)
Knowledge – Graduate* knows and understands:	
G.K1/ E.W7, 3 E.W14, 1	Student knows the issue of Maxillofacial and oral surgery including:

	a) symptoms and diagnosis of diseases of the paranasal sinuses, temporomandibular joint, oral mucosa, salivary glands, odontogenic infections. b) surgical and other treatment in maxillofacial trauma c) the difference in the treatment of children in head and neck region
G.K2	knows the indications for surgical treatment and invasive examination
G. K3/ F.W12, 6	knows the procedures in diagnosis and treatment of head and neck tumors including reconstructive surgery
G. K4	know the basic terms in maxillofacial surgery

* In appendix to the Regulation of Minister of Science and Higher education from 26th of July 2019 „graduate”, not student is mentioned.

5. ADDITIONAL EFFECTS OF LEARNING (non-compulsory)	
Number of effect of learning	Effects of learning in time
Knowledge – Graduate knows and understands:	
K1	Difference between types of fractures
K2	Difference between subspecialties of maxillofacial surgery
Skills– Graduate is able to:	
S1	Diagnose patient with orofacial pain
S2	State a differential diagnosis of patient with oral cavity tumour
Social Competencies – Graduate is ready for:	
SC1	Participation in a maxillofacial surgery
SC2	Communication with patient about his facial trauma

6. CLASSES		
Form of class	Class contents	Effects of Learning
Seminar 1	History of maxillofacial surgery Education requirements for Maxillofacial Surgery	
Seminar 2	Odontogenic infections	
Seminar 3	Clinical features and treatments of odontogenic sinusitis	
Seminar 4	Surgically treated diseases of the salivary glands	
Seminar 5	Diagnosis and surgical treatment of malignant tumours, including reconstructive surgery	
Seminar 6	Microsurgical reconstruction. Facial transplantation	
Seminar 7	Maxillofacial traumatology – Midface fractures	
Seminar 8	Maxillofacial traumatology – Mandibular fractures	

Seminar 9	Orthognathic surgery	
Seminar 10	Surgical treatment and reconstructive surgery of cysts and benign tumours of the jaws	
Seminar 11	Bone grafting	
Seminar 12	Temporomandibular joint disorders	

7. LITERATURE

Obligatory

1. Peterson's Principles of Oral and Maxillofacial Surgery, Michael Miloro , GE Ghali , Peter Larsen, Peter Waite, 2012

Supplementary

1. Oral and Maxillofacial Surgery Review: A Study Guide, Din Lam, Daniel Laskin, 2015
2. Maxillofacial Surgery, 3rd Edition, Peter Brennan, Henning Schliephake, G.E. Ghali, Luke Cascarini, Elsevier, 2016
3. Contemporary Oral and Maxillofacial Surgery, Larry J. Peterson, Edward Ellis III, James Hupp, Myron Tucker, 1998

8. VERIFYING THE EFFECT OF LEARNING

Code of the course effect of learning	Ways of verifying the effect of learning	Completion criterion
GK1-GK4	MCQ test	0-10 Fails, 11-20 Passes

9. ADDITIONAL INFORMATION(*information essential for the course instructor that are not included in the other part of the course syllabus e.g. if the course is related to scientific research, detailed description of, information about the Science Club*)

Medical University of Warsaw has property rights, including copyright, to the syllabus. The syllabus may be used for educational purposes at the MUW only. Using of the syllabus for other purposes requires consent of the MUW.

ATTENTION

The final 10 minutes of the last class in the block/semester/year should be allocated to students' Survey of Evaluation of Classes and Academic Teachers.

VOCATIONAL TRAINING:

Emergency Medicine – 2 weeks – 70h

Pediatrics – 2 weeks - 70h

4th year, 6-year program ED students

Faculty of Medicine

The summer clinical clerkships are mandatory for students to be assigned a pass for the whole year's academic performance since they are an inherent part of the medical instruction provided throughout the year of study.

Upon completion of the 4th year students are required to have one-month clinical clerkships at a teaching hospital in Poland or selected foreign countries.

The curriculum of clinical clerkship comprises:

- a) a two-week training in the emergency medicine,
- a) a two-week training in the pediatric ward.

The head of the ward or an appointed assistant is responsible for providing a detailed program of the training and scheduled duties as well as supervision of students' clinical performance.

Students carry out the work which is that of a regular physician and are supervised by a physician in charge.

During the training students are obliged to have four twenty-four-hour shifts (two on each ward) when they accompany the doctor on duty while he/she performs all the necessary clinical activities and procedures.

The goals of the instruction provided in the Pediatric ward are:

1. complete information about the organization of the Pediatric Ward / Children's Diseases Clinic / and organization links of the Department with open health care.
2. Assessment of the child's condition and its psychophysical development.
3. Understanding the principles of caring for an infant, feeding a healthy and sick child.
4. Improvement of the child's physical examination skills.
5. Getting acquainted with the rules of first aid.
6. Strengthening the skills of proper diagnosis and differentiation of basic disease entities with particular emphasis on acute cases.
7. Proper interpretation of the results of laboratory, radiological and pathological tests
8. Participation in medical visits and familiarization with the principles of keeping patient's medical records.
9. Evaluation of the hydration status of an infant with the determination of indications for irrigation (amount and composition of infusion fluid).
10. Understanding the principles of acid-base balance production.
11. Performing under the supervision of procedures: nasogastric intubation and gastric lavage, connecting the drip infusion and making injections.
12. Understanding sanitary and epidemiological regulations in the Infant and Children Department and methods of preventing hospital infections.
13. Participation in minor treatments, redressement.
14. Understanding the rules of conduct in life-threatening situations.

The goals of the instruction provided in the Intensive Care ward are:

1. Understanding the organization of the Intensive Care Ward.
2. Deepening knowledge of physiopathology associated with life-threatening conditions caused by injuries, serious infections, extensive operations.
3. Familiarization with treatment methods used in the intensive care unit with a strong emphasis on the acquisition of practical skills.
4. Getting to know the methods of monitoring the respiratory system, conducting mechanical ventilation with a respirator.
5. Getting to know the methods of cardiovascular monitoring and methods of pharmacological support of the circulatory system.
6. Evaluating the patient's state of consciousness, sedation in the intensive care unit.
7. Familiarization with infections in the intensive care unit and the principles of treatment of septic shock.
8. Ethical problems in intensive care (futile therapy, DNR).