MEDICAL UNIVERSITY OF WARSAW

FACULTY OF MEDICINE

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

http: // www.wum.edu.pl/

5th YEAR CURRICULUM

6-year program

Academic year: 2026/2027

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AUTHORITIES OF MEDICAL UNIVERSITY OF WARSAW – TERM 2024-2028

Rector – Professor Rafał Krenke, MD, PhD

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

Vice Rector for Science and Technology Transfer – Professor Marcin Sobczak, MD, PhD

Vice Rector for Human Resources – Professor Dorota Olczak-Kowalczyk, MD, PhD

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Vice Rector for International Relations, Development and Promotion – Professor Michał Grąt, MD, PhD

FACULTY AUTHORITIES OF MEDICAL UNIVERSITY OF WARSAW – TERM: 2024-2028

Faculty of Medicine – Professor Paweł Włodarski MD, PhD

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

DEAN'S OFFICE

Head of the Dean's Office – Krystyna Jarząb, MA

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

Student Administration Officer (4th, 5th, 6th - Year) – Dominka Renik, MA and Patrycja Karpińska, MA

STUDENT GOVERNMENT REPRESENTATIVES:

President – Alexis Vourtsis

Vice President, Head of Academic Affairs – Alexander Steiner

Vice President, Head of Student Affairs – Sylvie Marie Régine Etienne

Head of Communications and Administrative Management – Maria Kienitz

Social Media Coordinator – Brendan Tadiwa Ngandu

Events Coordinator – Dyia Bachour

Events Coordinator – Divit Amarnani

www: *https://ed.wum.edu.pl/edsg*
https://edsgmuw.wixsite.com/wumedsg

CLASS REPRESENTATIVE:

Arman Sürmeli – 5 year

SCHEDULE – ACADEMIC YEAR 2026/2027

6-year program

WINTER SEMESTER – 01.10.2026 – 21.02.2027

STUDENT'S ACADEMIC CLASSES:	01.10.2026 – 20.12.2026
	04.01.2027 – 31.01.2027
WINTER HOLIDAYS:	21.12.2026 – 03.01.2027
EXAM SESSION:	**01.02.2027 – 07.02.2027**
DAYS OFF BETWEEN SEMESTER:	08.02.2027 – 14.02.2027
RETAKE EXAM SESSION:	15.02.2027 – 21.02.2027

SUMMER SEMESTER – 22.02.2026 – 30.09.2027

STUDENT'S ACADEMIC CLASSES:	22.02.2027 – 24.03.2027
	01.04.2027 – 13.06.2027
EASTER HOLIDAYS:	25.03.2027 – 31.03.2027
DAYS OFF BEFORE EXAM SESSION:	14.06.2027 – 20.06.2027
EXAM SESSION:	**21.06.2027 – 11.07.2027**
SUMMER HOLIDAYS:	12.07.2027 – 30.09.2027
RETAKE EXAM SESSION:	30.08.2027 – 12.09.2027

Announcement no. 90/2026 of the Rector of the Medical University of Warsaw of April 13, 2026

Curriculum of the 5th year of 6-year 2026/2027 ED program and the list of contents

5th year

page	subject	form of credit	semester	Total no of hours	including				ECTS
					lecture	seminar	class	practical	
5	Anestesiology and Intensive Care	exam	1	60		20	40		3
13	Neurology	exam	1	100		30	70		5
20	Oncology	exam	1&2	60	20	20	20		3
26	Ortopedics and Traumatology	exam	1&2	60		20	40		3
31	Forensic Medicine with Elements of Law	exam	1&2	50		25	25		3
37	Ophtalmology	exam	1&2	50		10	40		2
42	Internal Medicine-Diabetology	credit	1&2	30	4	16	10		2
47	Internal Medicine-Gastroenterology	credit	1&2	30	4	16	10		2
52	Internal Medicine-Nephrology	credit	1	30	4	16	10		2
58	Internal Medicine-Endocrinology	credit	1&2	30	4	16	10		2
63	Neurosurgery	credit	2	30		10	20		2
68	Pediatrics - nephrology	credit	1&2	30	5	10	15		2
73	Pediatrics - hematology & oncology	credit	1&2	30	5	10	15		2
78	Obstetrics and Gynecology + Endocrinology	credit	2	140		20	120		9
83	Surgery	credit	1&2	100		35	65		7
110	Public health	credit	2	25		25			1
89	Rehabilitation	credit	2	30		10	20		1
94	Transplantology	credit	2	40	6	19	15		2
99	Palliative Medicine	credit	1	20		20			1
104	Neonatology	credit	1&2	15		5	10		1
115	Vocational Training - Emergency Medicine, Obstetrics & Gynecology	credit	2	140				140	4
	Optional course	credit	1&2	60		60			4
				1160	52	413	555	140	63

ANESTHESIOLOGY AND INTENSIVE THERAPY

1. IMPRINT	
Academic Year	2026/2027
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	---1st Department of Anesthesiology and Intensive Care (1MC1), Infant Jesus Teaching Hospital, Lindleya 4, 02-005 Warsaw www.anestezjologia1.wum.edu.pl klinanest1@wum.edu.pl tel: 22 502 17 21 --- 2nd Department of Anesthesiology and Intensive Care (1MC2), Public Central Teaching Hospital, Banacha 1a, 02-097 Warsaw, Poland kait.csk@uckwum.pl tel: 22 599 20 01 ---Department of Paediatric Anaesthesia (1MC3), Pediatric Teaching Clinical Hospital, 63a Żwirki i Wigury St., anestezjologia.dziecieca@wum.edu.pl tel: 22 317 98 61
Head of Educational Unit / Heads of Educational Units	dr hab. n. med. Janusz Trzebicki dr hab. n. med. Mateusz Zawadka dr hab. n. med. Izabela Pągowska-Klimek
Course coordinator	dr hab. n. med. Janusz Trzebicki janusz.trzebicki@wum.edu.pl
Person responsible for syllabus	Marek Janiak MD +48 22 502 17 21 marek.janiak@wum.edu.pl
Teachers	1st Department of Anesthesiology and Intensive Care:

	dr hab. n. med. Janusz Trzebicki, Beata Błaszczyk MD PhD, Lidia Jureczko MD PhD, Marcin Kołacz MD PhD, Rafał Kowalczyk MD PhD, Jan Pluta MD PhD, Marek Janiak MD PhD, Romana Cal MD, Przemysław Bornsztajn MD, Pawel Wrzesień MD 2nd Department of Anesthesiology and Intensive Care: dr hab. n. med. Paweł Andruszkiewicz, Wojciech Romanik MD PhD, Anna Kosińska MD, Marta Dec MD, Paula Dudek MD, Jarosław Gadomski MD, Aleksandra Święch-Zarzycka MD, Dawid Tomasik MD, Paulina Walczak-Wieteska MD, Łukasz Wróblewski MD, dr hab. n. med. Mateusz Zawadka MD, Aleksandra Zawiślak-Michalak MD, Agata Graczyńska MD Pediatric Department of Anesthesiology and Intensive Care: dr hab. n. med. Izabela Pągowska-Klimek, Magdalena Mierzewska-Schmidt MD PhD, Maciej Kaszyński MD PhD, Katarzyna Mazur-Wołynko MD, Dariusz Skaba MD

2. BASIC INFORMATION

Year and semester of studies	V year, IX semester	**Number of ECTS credits**	3.00

FORMS OF CLASSES **Contacting hours with academic teacher**	**Number of hours**	**ECTS credits calculation**
Lecture (L)		
Seminar (S)	20	0.80
Classes (C)	40	1.60
e-learning (e-L)		
Practical classes (PC)		
Work placement (WP)		
Unassisted student's work		
Preparation for classes and completions	15	0.60

3. COURSE OBJECTIVES

O1	Knowledge and practical skills in advanced cardiopulmonary resuscitation based on most recent guidelines
O2	Knowledge and practical skills in recognition and management of life threatening conditions
O3	Knowledge of pain management in diverse clinical scenarios
O4	Knowledge of pre-operative management of a surgical patient
O5	Knowledge of fundamentals of general and regional anesthesia
O6	Understanding perioperative monitoring
O7	Understanding indications for intensive care treatment

O8	Understanding of futile therapy in intensive care
O9	Knowledge and practical skills in management of respiratory failure

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:
Knowledge – Graduate* knows and understands:	
E.W6.	the most common life threatening conditions in children and the management of these conditions
E.W29.	principles of pain management, including in cancer and chronic pain
E.W41.	capabilities and limitations of laboratory testing in emergencies
F.W4.	principles of perioperative safety, patient preparation for surgery, general and local anesthesia 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.W15.	principles of suspecting and recognizing the brain death
C.W29.	definition and pathophysiology of shock, especially the differential diagnosis of shock and multiorgan failure
D.W5.	rules and methods of communication with patients and their family that contribute to development of an empathic relationship, based on trust
D.W14.	rules of promotion of health, its objectives and main directions of operation, with a special focus on the awareness of healthy lifestyle
G.W11.	principles of the medical privilege, keeping medical documentation and penal, civil and professional liability of a medical doctor
Skills– Graduate* is able to:	
E.U13.	assess and describe the patient's somatic and psychological states
E.U16.	plan diagnostic, therapeutic and preventive treatment
E.U18.	propose the individualization of applicable therapeutic guidelines and alternative treatment in the case of ineffectiveness or contraindications to standard therapy
E.U21	recognize the conditions in which life expectancy, functional patient state or preferences limit the treatment according to the guidelines for a given disease

E.U24.	interpret laboratory test results with the identification of reasons for deviation
E.U25.	use feeding protocols (enteral and parenteral)
E.U29.	perform the basic medical procedures, including: 1) body temperature measurement, pulse count and non-invasive blood pressure check, 2) vital signs monitoring with the aid of a pulse oximeter and cardiac monitor, 3) spirometry, oxygen therapy, manual ventilation and basics of mechanical ventilation 4) oro- and nasopharyngeal airway device placement 5) intravenous, intramuscular, subcutaneous injections, intravenous cannulation, venous blood sampling, blood culture taking, arterial and capillary blood sampling, 6) nasal, pharyngeal and skin swab taking, 7) male and female urinary bladder catheterisation, nasogastric tube placement, stomach lavage, enema, 8) standard resting electrocardiogram with adequate interpretation, electrical cardioversion and defibrillation, 9) simple strip test and blood glucose check.
E.U32.	plan specialist consultations
E.U33.	initiate the basic management in acute poisoning
E.U34.	monitor the patient's condition in acute chemical or medication poisoning
E.U37.	properly manage traumas (place a bandage, immobilize, manage and suture wounds)
E.U38.	keep a patient's medical records.
F.U5	place a venous access
F.U10	perform basic life resuscitation with automated external defibrillation devices and other resuscitation measures, as well as first aid
F.U11	perform resuscitation according to the latest advanced guidelines
F.U12	monitor perioperative care with the aid of basic vital signs;
F.U21	assess an unconscious patient according to the international point scales
D.U1	include patient's subjective needs and expectations resulting from the socio-cultural background in the entire therapeutic process
D.U5	conduct an interview with an adult patient, a child and the family with empathy and listeni actively; is able to discuss the patient's life situation
D.U13	respect ethical standards in professional activities
D.U15	observe patient rights
D.U16	assume the responsibility for improving his/her qualifications and teaching other people
D.U17	critically analyze the medical bibliography (also in English) and draw conclusions

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:	
K1	developing and maintaining a deep and respectful contact with a patient, demonstrating understanding of differences in belief and culture
K2	being guided by the patients wellbeing, placing it first line
K3	keeping doctor-patient confidentiality and patient's rights
K4	making decisions for patients based on ethical principles, with the understanding of their social background and limitations resulting from the disease
K5	observing and identifying own limitations and assessing personal deficits and educational Leeds
K6	propagating health behaviours
K7	using objective sources of information
K8	formulating conclusions based on personal measurements and observations
K9	introducing rules of professional relations and teamwork among specialists, inclusive of representatives from other medical specialties, also in a multicultural and multinational environment
K10	formulating opinions regarding different aspects of professional activity
K11	taking responsibility for decisions made during professional activities, inclusive of self and others safety

6. CLASSES

Form of class	Class contents	Effects of Learning
Seminar		
S1	Patient preparation for surgery and general anesthesia, Post-operative patient monitoring	E.W41, F.W4, F.W5, E.U13, E.U16, E.U32, F.U12, D.W5, D.W14, D.U1, D.U5, D.U13, D.U14, D.U15, D.U16, D.U17, G.W11
S2	Safe use of local anesthetics. Regional anesthesia: peripheral nerve blockade.	F.W4, E.U32
S3	Regional anesthesia: central nerve blockade	F.W4, E.U32
S4	Postoperative pain management	E.W29

S5	Principles of intensive care: indications. Futile therapy.	F.W6, F.W15, E.U18, E.U21, E.U24, E.U25
S6	Respiratory failure - management	F.W6
S7	Shock – management, intravascular access	C.W28
S8	Management of life-threatening conditions in children	E.W6
Practical classes		
C1	ALS (Advanced Life Support) – practical skills/Simulation Center	F.W7
C2	Management of life threatening conditions. Point of care ultrasonography in anesthesiology, intensive care and emergency states	E.U29, E.U33, E.U34, E.U37, F.U5, F.U10, F.U11, F.U21
C5 C6 C7 C8	Practical classes in operating theatres	F.W4, F.U5
C9	Practical classes in the postoperative and recovery units	E.U38, F.U5, F.U12
C10	Practical classes in the intensive care unit	E.U38, E.U16, E.U24 K1-K11

7. Literature

Obligatory

1. European Resuscitation Council (ERC) 2025 Advanced Life Support (ALS) guidelines www.erc.edu
2. 2011 and 2022 European Society of Anesthesiology and Intensive Care (ESAIC) perioperative fasting in adults and children https://journals.lww.com/ejanaesthesiology/Fulltext/2011/08000/Perioperative_fasting_in_adults_and_children__.4.aspx https://www.esaic.org/uploads/2022/01/pre_operative_fasting_in_children__a_guidelin.pdf
3. 2022 Joint ESAIC/ESRA guidelines on regional anaesthesia in patients on antithrombotic drugs: https://www.esaic.org/uploads/2022/01/regional_anaesthesia_in_patients_on_antithrom.pdf
4. Surviving Sepsis Campaign: International Guidelines for Management of Sepsis and Septic Shock 2026: https://www.sccm.org/clinical-resources/guidelines/guidelines/surviving-sepsis-campaign-international-guidelines-for-management-of-sepsis-and-septic-shock-2026
5. Acute Respiratory Distress Syndrome: The Berlin Definition https://jamanetwork.com/journals/jama/article-abstract/1160659
6. "Anesthesia Student Survival Guide" Jesse M Ehrenfeld; Scott Segal; Richard D Urman 2010
7. "Basic Clinical Anesthesia" Paul K Sikka; Shawn T Beaman; James A Street 2015
8. Morgan & Mikhail's Clinical Anesthesiology, 7e (available via www.bibloteka.wum.edu.pl)

Supplementary

8. Verifying the effect of learning

Code of the course effect of learning	Ways of verifying the effect of learning	Completion criterion
E.W6 E.W29 E.W41 F.W4 F.W5 F.W6 F.W7 F.W15 C.W29 E.U13 E.U16 E.U18 E.U21 E.U24 E.U25 E.U29 E.U32 E.U33 E.U34 E.U37 E.U38	Student presence card – activity and presence will be noted in the card during classes. Short entry tests and mini-OSCE based on materials provided prior to class before each seminar may be done (usually 10 questions) Mini-OSCE (Objective Structured Clinical Examination) may be done before the Advanced Life Support classes	Acquiring knowledge from lectures in given anesthesia department. Presence during classes and active participation confirmed by educator.

F.U5 F.U10 F.U11 F.U12 F.U21 D.W5 D.W14 G.W11 D.U1 D.U5 D.U13 D.U14 D.U15 D.U16 D.U17 K1-11		Pass of short test with at least 7 correct answers; in case of failure – repeat oral colloquium with assistant until pass.
E.W6 E.W29 E.W41 F.W4 F.W5 F.W6 F.W7 F.W15 C.W29 E.U13 E.U16 E.U18 E.U21 E.U24 E.U25 E.U29 E.U32 E.U33 E.U34 E.U37 E.U38 F.U5 F.U10 F.U11 F.U12 F.U21 D.W5 D.W14 G.W11 D.U1 D.U5 D.U13 D.U14 D.U15 D.U16 D.U17 K1-11	Practical assessment by assistant during cardiopulmonary resuscitation Entry test before simulation center class may be done (usually 10 questions) and a Mini-OSCE (Objective Structured Clinical Examination) may be done for the Advanced Life Support classes	Competence in advanced life support. Pass of entry test with at least 7 correct answers. In case of failure – a repeat oral colloquium with assistant/lecturer until pass. Individual success in cardiopulmonary resuscitation (ALS) is required
E.W6 E.W29 E.W41 F.W4 F.W5 F.W6 F.W7 F.W15 C.W29 E.U13 E.U16 E.U18 E.U21 E.U24 E.U25 E.U29 E.U32 E.U33 E.U34 E.U37 E.U38 F.U5 F.U10 F.U11 F.U12 F.U21 D.W5 D.W14 G.W11 D.U1 D.U5 D.U13 D.U14 D.U15 D.U16 D.U17 K1-11	Final oral examination – three main topic questions	Obtaining at least a minimum satisfactory answer to each of the three questions

9. Additional information

During the practical classes and on contact with patients, we recommend medical clothing with short sleeves. Please do not wear private clothing. In case of using a white apron on personal clothing, the apron should be fastened. Long hair should be pinned back. It is necessary to change to theatre applicable footwear with adherence to safety rules. During practical classes in areas with patients – the rule “nothing below elbow” should be applied – that is watches, jewelry should be taken off. The “5 moments of hand hygiene” should be applied. Diagnostic medical gloves should be donned only after cleaning and/or disinfection of hands, directly before patient contact.
Students unprepared for classes may not be allowed to attend: mini tests and mini-OSCEs may be conducted.
PUNCTUALITY is mandatory.
Detailed information on the conduct and plans of the classes will be provided in electronic form or during the first class in the assigned department.

Groups are divided to be under the primary care of the 1st Department (Lindleya) or the 2nd Department (Banacha); please check the master program provided by the deanery which group is allocated to a given department; group swaps are not allowed after the start of the classes and students will be allowed to change Departments only in exceptionally rare cases.

Access to materials will be made available via the electronic platform www.e-learning.wum.edu.pl
Login details are the same as for the SSL-WUM platform
Identifier: (s0 + album number): s0XXXXX
Password: the same as for SSL-WUM
Additional materials necessary for seminars, practical classes and entry tests will be made available electronically.

A student presence card is mandatory and must be submitted to the department secretariat. Presence during all classes must be noted in the student card and at the end of the classes must be brought back to the secretariat. All issues related to the absence must be reported to the Head of the given department or to the course coordinator, Marek Janiak/Łukasz Wróblewski.

CONDITIONS to be allowed to sit the FINAL EXAMINATION:
Presence in all seminars and practical classes + a pass in the practical classes in the simulation center

Final examination will be ORAL.
The examination will be taken in the department in which the student had his/her classes. The student presence card must be brought to the exam. An identity card with a photo must be presented for identity confirmation. An exam committee will question each student individually. Three main questions will be asked. A pass mark will be awarded if a student answers all question at least to a satisfactory level. The final mark is derived as an average of all marks awarded for each main question, unless a FAIL is awarded for any of the questions.
2.0 (fail) – a fail for any of the three main questions
3.0 (satisfactory) – average 3-3.49
3.5 (rather good) – average 3.5-3.99
4.0 (good) – average 4.0-4.49
4.5 (above good) – average 4.5-4.99
5.0 (very good) – average 5.0

A second attempt may be awarded with the same conditions as for the first attempt, as above.

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ATTENTION

The final 10 minutes of the last class of the block/semester/year should be allotted for students to fill out the Survey of Evaluation of Classes and Academic Teachers

Neurology

1. IMPRINT	
Academic Year	2026/2027
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 *(exam / completion)*	exam
Educational Unit / Educational Units *(and address / addresses of unit / units)*	1.Department of Neurology (1WC), UCKWUM; Banacha 1a, 02-097 Warszawa 2. Department of Neurology (WLS20), Szpital Bielański, Cegłowska 80, 01-809 Warszawa, 3. Department of Neurology (NZP), Mazowiecki Szpital Bródnowski, Kondratowicza 8
Head of Educational Unit / Heads of Educational Units	1. Prof. dr hab. Anna Kostera-Pruszczyk (UCK WUM, Banacha 1a) 2. Prof. dr hab. Izabela Domitrz (Szpital Bielański, Cegłowska 80) 3. Prof. dr hab. Dariusz Koziorowski (Mazowiecki Szpital Bródnowski, Kondratowicza 8)
Course coordinator *(title, First Name, Last Name, contact)*	1. .Department of Neurology (1WC) UCK WUM, Banacha 1a – Dr n.med. Aleksandra Podlecka-Piętowska apodlecka@wum.edu.pl – Dr n.med. Marta Lipowska marta.lipowska@wum.edu.pl 2. Department of Neurology (WLS20) Szpital Bielański, Cegłowska 80 – Dr n. med. Joanna Cegielska jcegielska@wum.edu.pl 3. Department of Neurology (NZP) Mazowiecki Szpital Bródnowski, Kondratowicza 8 – Dr hab. n. med. Piotr Alster palster@wum.edu.pl – Dr hab. n. med. Natalia Madetko-Alster natalia.madetko@wum.edu.pl (Mazowiecki Szpital Bródnowski, Kondratowicza 8)

Person responsible for syllabus *(First name, Last Name and contact for the person to whom any objections concerning syllabus should be reported)*	Prof. dr hab. n.med. Anna Kostera-Pruszczyk anna.kostera-pruszczyk@wum.edu.pl Dr n.med. Aleksandra Podlecka-Piętowska apodlecka@wum.edu.pll
Teachers	**Department of Neurology, UCKWUM; Banacha 1a** Prof. dr hab. n.med. Anna Kostera-Pruszczyk Prof. dr hab. n.med. Beata Zakrzewska-Pniewska Prof. dr hab. n.med. Piotr Janik Prof. dr hab. n.med. Magdalena Kuźma-Kozakiewicz Prof. dr hab. n.med. Anna Potulska-Chromik Dr hab. n.med. Monika Nojszewska Dr n.med. Antoni Ferens Dr n.med. Biruta Kierdaszuk Dr n.med. Marta Lipowska Dr n.med. Anna Łusakowska Dr n.med. Andrzej Opuchlik Dr n.med. Anna Macias Dr n.med. Aleksandra Podlecka-Piętowska Dr n.med. Ewa Sobieszczuk Dr n.med. Piotr Szczudlik Dr n.med. Justyna Kaczyńska Lek. Judyta Barańska Lek. Krzysztof Nieporęcki Lek. Anna Frączek-Kozlovska **Department of Neurology, Szpital Bielański, Cegłowska 80** Prof. dr hab. n.med. Izabela Domitrz Prof. dr hab. n.med. Jan Kochanowski Dr n.med. Joanna Cegielska Dr n.med. Katarzyna Kępczyńska Dr n.med. i n. o zdr. Anna Kocwa-Karnaś Dr n med. Daniel Malczewski Dr n med. Beata Mielańczuk-Lubecka Dr n.med. Jakub Stolarski Dr n.med. Agata Wierzchowska-Ciok Dr n.med. Martyna Wypych Dr n. med. Anna Zduńska Lek. Michał Białobrzewski Lek. Piotr Chądzyński Lek. Olga Grodzka Lek. Lidia Kiryła Lek. Agnieszka Korzeluch Lek. Viktor Lipko Lek. Anna Łapaj Lek. Ewa Post Lek. Anna Puczyńska Lek. Patryk Sochań Lek. Katarzyna Stopińska Lek. Justyna Wołos Mgr Małgorzata Polit **Department of Neurology, Mazowiecki Szpital Bródnowski, Kondratowicza 8** Prof. dr hab. n. med. Dariusz Koziorowski Prof. dr hab. n. med. Andrzej Friedman Dr hab. n. med. Piotr Alster Dr hab. n. med. Natalia Madetko-Alster Dr med. Justyna Dutkiewicz Dr n. med. Ewa Krzyżanowska Dr n. med. Jolanta Kwiatek-Majkusiak Dr n. med. Łukasz Milanowski

	Dr n. med. Joanna Samborska-Ćwik Dr n. med. Stanisław Szlufik lek. Piotr Dybcio

2. BASIC INFORMATION

Year and semester of studies	5 year, first (winter) semester	**Number of ECTS credits**	5.00

FORMS OF CLASSES **Contacting hours with academic teacher**	**Number of hours**	**ECTS credits calculation**
Lecture (L)		
Seminar (S)	30	1,2
Classes (C)	70	2,8
e-learning (e-L)		
Practical classes (PC)		
Work placement (WP)		
Unassisted student's work		
Preparation for classes and completions	25	1.0

3. COURSE OBJECTIVES

O1	etiology and symptoms of neurologic diseases which they can deal with during their work as general practitioner (family doctor)
O2	diagnostic procedures and tests used in neurology and interpretation of their results
O3	management of the most common neurological 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:** *(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.W1	environmental and epidemiological conditions of the most common diseases
G.K2/ E.W13	basic syndromes of neurological symptoms
G.K3/ E.W14	causes, symptoms, principles of diagnosis and therapeutic management in the most common diseases of the nervous system, including: 1) headaches: migraine, tension headache, headache syndromes and V nerve neuralgia, 2) cerebral vascular diseases, especially stroke, 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) craniocerebral injuries, in particular concussion;
G.K4/ E.W42	indications for the implementation of monitored therapy
Skills– Graduate* is able to:	
G.S1/ E.U1	conduct a medical interview with an adult patient;
G.S2/ E.U3	conduct a complete and targeted physical examination of an adult patient;
G.S3/E.U7	assess the general condition, state of consciousness and awareness of the patient;
G.S4/ E.U12	carry out differential diagnosis of the most common diseases of adults and children;
G.S5/ E.U14	recognize life-threatening states;
G.S6/ E.U15	recognize the condition after consuming alcohol, drugs and other stimulants;
G.S1/ E.U16	plan diagnostic, therapeutic and prophylactic procedures;
G.S7/ E.U20	qualify the patient for home and hospital treatment;
G.S8/ E.U21	identify conditions in which the life expectancy, functional state or patient preferences limit the management of the guidelines defined for the given disease
G.S9/ E.U24	interpret the results of laboratory tests and identify the causes of deviations from the norm
G.S10/ E.U30, 5	assist in the following medical procedures and procedures: a 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:	
K1	
K2	
Skills– Graduate is able to:	

S1	
S2	
Social Competencies – Graduate is ready for:	
SC1	
SC2	

6. Classes

Form of class	Class contents	Effects of Learning
SEMINARS	They discuss the symptoms, diagnosis and treatment of the most common neurological diseases and syndromes. The topics of the seminars include: 1. Anatomy and physiology of the Central and Peripheral Nervous System- repetition 2. Hemorrhagic stroke and subarachnoid hemorrhage 3. Ischemic stroke 4. Management of ischemic stroke 5. Motor neuron disease and other spinal cord diseases 6. Skeletal muscle diseases 7. Myasthenia and disorders of the neuromuscular junction 8. Peripheral neuropathies 9. Demyelinating diseases 10. Back pain - diagnosis and management 11. Vertigo- diagnosis and management 12. Headache - diagnosis and management 13. Neoplastic tumors of the nervous system 14. Epilepsy 15. Traumatic lesion of the nervous system 16. Movement disorders 17. Dementias 18. Neurological signs and symptoms in systemic diseases and general medicine 19. Brain death and neurocritical care	G.K1, G.K2., G.K3, G.K4
Practical training	1. teaching physical neurological examination, 2. interpretation of diagnostic tests and algorithms of diagnostic procedure, 3. demonstration of patients with selected neurological diseases 4. demonstration of basic additional tests used in neurological diagnostics: Doppler ultrasound examination, neuroimages, EMG, EEG	G.S1, G.S2, G.S3, G.S4, G.S5, G.S6, G.S7, G.S8, G.S9, G.S10,

7. Literature

Obligatory

"Lange Clinical Neurology", Greenberg D, Aminoff M, Simon R. edition 11, Mc Graw Hill Education 2020

The manual has not been updated since 2020. In the event of discrepancies, the information from the annually updated seminars shall apply (e-learning platform).

Supplementary

1. "Neurology and Neurosurgery Illustrated" K.W.Lindsay, I.Bone. Churchill Livingstone 2010
2. "Clinical neuroanatomy" R.S Snell, 8 edition. Lippincott Williams & Wilkins, a Wolters-Kluwer.2022

3. "Mosby's Color Atlas and Text of Neurology". Perkin DG; Times Mirrors Int. Publishers Ltd 1998

8. VERIFYING THE EFFECT OF LEARNING

Code of the course effect of learning	Ways of verifying the effect of learning	Completion criterion
G.S2	Practical skills examination	Positive evaluation of the teaching assistant
G.K1, G.K2., G.K3, G.K4	Final colloquium (20 MCQ and/or open questions).	threshold number of points – more than 60% good answers
G.K1, G.K2., G.K3, G.K4 G.S1, G.S3, G.S4, G.S5, G.S6, G.S7, G.S8, G.S9, G.S10,	Final exam in winter exam session (100 MCQ)	exam threshold = 56 good answers thresholds for individual grades: • grade 3.0 = 56-64 good answers • grade 3.5 = 65-73 • grade 4.0 = 74-82 • grade 4.5 = 83-91 • grade 5.0 = 92-100

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)*

- Duration of the neurology course: 3 weeks (from Monday to Friday)
- During the course it is possible to be absent only once (excused absence) .The student makes up for this absence in the form determined by the assistant (presence on duty, writing a paper etc.)
- If a student has 2-3 absences, he/she must make up for them with another group or in the form determined by the assistant. Only then, the student can take the colloquium, which he/she passes with another group.
- More than 3 absences result in failure to complete a block of classes.
- 3 latenesses of more than 15 minutes constitute an unexcused absence.

SEMINARS
The seminars are conducted live by assistants. Seminar outlines and additional self-study materials are available on the e-learning platform.

PRACTICAL TRAINING
The first week of classes is devoted to teaching neurological examination and demonstrations of clinical cases. In the following weeks, students are divided into subgroups and examine patients under the supervision of designated assistants. In the last week of classes, a practical test of neurological examination skills is carried out.

PRELIMINARY TEST
The preliminary test takes place on the first day of the course. The test consists of 5 questions and covers the basic knowledge of the anatomy and physiology of the nervous system. The test questions are on e-learning platform.
In the event of a negative result of the test, the student must take it again at the end of the first week of classes.

PRACTICAL SKILLS EXAMINATION
In the last week of the classes, students are checked for their practical skills in neurological examination

FINAL COLLOQUIUM
On the last day of the course students take the final colloquium consisting of 20 open and/or multiple choice questions. More than 60% correct answers are required to pass the test. The colloquium can be re-passed only twice. If the results of the repetitive tests are negative, the student must repeat the entire course of neurology.

To credit the neurology course, the student must be present at all classes (with the exception of 1 allowed absence) and have at least a satisfactory (3.0) grade with:

- preliminary test
- practical skills examination
- final colloquium

FINAL EXAMINATION

The final examination is held during the winter examination session. The examination takes the form of a single-choice test consisting of 100 questions. The passing threshold is fixed at 56 correct answers out of 100. The score ranges for individual grades are also fixed and increase in 9-point intervals:

Grade 3.0: 56–64 points
Grade 3.5: 65–73 points
Grade 4.0: 74–82 points
Grade 4.5: 83–91 points
Grade 5.0: 92–100 points

If the number of examination questions is reduced, the thresholds are lowered by a number of points equal to the number of cancelled questions.

If a student fails the examination, they retake it during the resit examination session in the form of a test. If the result is again negative, the student takes an examination before an examination board.

In the event of an excused absence from the examination on the first scheduled date, the student takes the first attempt during the resit examination session.

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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.

Oncology

1. IMPRINT	
Academic Year	2026/2027
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 Oncology **(2W11)**, Medical University of Warsaw 1a Banacha Str., 02-097 Warsaw phone 22-599 13 91, fax 22-599-13-90, e-mail: onkologia.csk@uckwum.pl - Department of Hematology, Oncology and Internal Medicine **(1WP)**, Medical University of Warsaw, 1a Banacha Str., 02-097 Warsaw phone 22-599 28 18, fax 22-599-14-18, e-mail: hematologia@wum.edu.pl
Head of Educational Unit / Heads of Educational Units	Prof. Rafał Stec, M.D, PhD (2W11) Prof. Grzegorz W. Basak, M.D., PhD (1WP)
Course coordinator	Leszek Kraj, M.D, PhD **(2W11)**, e-mail: leszek.kraj@wum.edu.pl
Person responsible for syllabus	Leszek Kraj, M.D, PhD **(2W11)**, e-mail: leszek.kraj@wum.edu.pl

Teachers	Rafał Stec, M.D, PhD, Leszek Kraj M.D. PhD,,. Ph.D., Prof Wiesław Wiktor Jędrzejczak M.D, Ph.D, Krzysztof Woźniak, M.D., Aleksandra Semeniuk-Wojtaś M.D., PhD., Maciej Gryziak M.D., Martyna Tyszka, M.D., Letycja Róg MD, Aneta Gawin MD, Dorota Płoska MD, Nadia Majewicz

2. BASIC INFORMATION

Year and semester of studies	5 year, 9 & 10 semester	**Number of ECTS credits**	3.00

FORMS OF CLASSES **Contacting hours with academic teacher**	**Number of hours**	**ECTS credits calculation**
Lecture (L)	20	0.80
Seminar (S)	20	0.80
Classes (C)	20	0.80
e-learning (e-L)		
Practical classes (PC)		
Work placement (WP)		
Unassisted student's work		
Preparation for classes and completions	15	0.60

3. COURSE OBJECTIVES

O1	Diagnostic tests in oncology
O2	Epidemiology of cancer
O3	Contemporary cancer therapy
04	Palliative medicine
05	Pain care in cancer therapy
06	The most common cancers - principles of diagnostic and therapeutic procedures

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 the effect c 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:	
E.W23	The student knows environmental and epidemiological conditions of the most common human cancers
E.W24	The student knows the basics of early detection of tumors and oncology screening principles
E.W25	The student knows the possibilities of contemporary cancer therapy (including multimodal therapy), perspectives of cell and gene therapies and their undesirable effects
E.W26.	The student knows the principles of combined therapies in oncology, algorithms of diagnostic and therapeutic procedures in the most common human cancers
E.W27.	The student knows and understands the causes, symptoms, principles of diagnosis and therapeutic treatment in the most common problems of palliative medicine, including: a. symptomatic treatment of the most common somatic symptoms. b. Proceedings in tumor cachexia and in the prevention and treatment of pressure ulcers
E.W28	The student knows the rules of palliative treatment with the patient in the terminal state
E.W29	The student knows the principles of pain treatment, including cancer and chronic pain
Skills– Graduate* is able to:	
E.U1	The student conducts a medical interview with an adult patient
E.U16	The student plans diagnostic, therapeutic and prophylactic procedures
E.U18	The student proposes to individualize the existing therapeutic guidelines and other methods of treatment for ineffectiveness or contraindications to standard therapy
E.U21	The student defines the states in which the duration of life, functional status or preferences of the patient limit the treatment in accordance with the guidelines laid down for a given disease
E.U24	The student interprets laboratory tests and identifies the causes of deviations
E.U30	The student assists in carrying out the following procedures and medical procedures: transfusion of blood and blood derivatives, drainage of the pleural cavity, puncture of the peritoneal cavity, lumbar puncture, fine needle biopsy
E.U31	The student interprets the pharmaceutical characteristics of medicinal products and critically assesses the advertising materials regarding medicines
E.U32	The student plans specialist consultations
E.U38	The student completes the 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	

K2	
Skills– Graduate is able to:	
S1	
S2	
Social Competencies – Graduate is ready for:	
SC1	
SC2	

6. Classes

Form of class	Class contents	Effects of Learning
LECTURES	**Lectures (prof. Wiesław Jędrzejczak) 1WP** 1. Epidemiology of cancer 2. Biology of cancer 3. Biology of cancer and therapeutic strategies 4. General diagnostic approach to cancer patient 5. General therapeutic approach to cancer patient 6. Cancer chemotherapy – basic principles. 7. Cancer chemotherapy – specific regimens. 8. Hormonotherapy and biotherapy of cancer 9. Search for new cancer remedies and clinical trials. 10. Patient with cancer: how to talk with him?	E.W23 E.W24 E.W25 E.W26 E.W27 E.W28 E.W29
SEMINARS	**SEMINARS and CLASSES** 1.Introduction to the Oncology 2. Skin cancers 3. Cancer staging 4. Oncology - concept of comprehensive care, future trends in care and therapy. 5. Clinical approach to principles of chemotherapy 6. Emergency in oncology 7. Case studies: patients suffering from breast cancer, ovarian cancer, cancers of the uterus 8. Case studies: patients suffering from common cancers of the gastrointestinal tract: stomach, pancreas, colon and rectum 8. Principles of radiotherapy 9. Psycho-oncology : Communication with patients 10. Cancer in pregnancy 11. Central Nervous System Cancers 12. Supportive care in oncology 13. Fundamentals of clinical trial analysis and international guidelines in oncology Classes: Rounds in oncology division. Preparation of cytostatic agents for administration	E.W23 E.W24 E.W25 E.W26 E.W27 E.W28 E.W29 E.U1 E.U3 E.U7 E.U12 E.U14 E.U16 EU17 E.U18 E.U20 E.U21 E.U22 E.U23 E.U24 E.U25 E.U29 E.U30 E.U31 E.U32

		E.U37 E.U38

7. Literature

Obligatory

Oxford Handbook of Oncology – Jim Cassidy et al, 5th Edition

Supplementary

1. "Harrison's Principles of 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
E.U1, E.U16, E.U18 E.U21, E.U24, E.U30 E.U31, E.U32, E.U38	Practical skills examination	Positive evaluation of the teaching assistant
	Final colloquium (20 MCQ test questions).	Threshold number of points – 60% good answers
E.W23, E.W24, E.W25 E.W26., E.W27., E.W28 E.W29	Final exam in summer exam session (60 MCQ test questions)	**3.0 (satisfactory)** *60% points to pass* **3.5 (rather good)** *Gauss curve* **4.0 (good)** *Gauss curve* **4.5 (more than good)** *Gauss curve* **5.0 (very good)** *Gauss curve*

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)*

Attendance at all seminars and practical classes is mandatory.
A single excused absence must be made up in a manner agreed upon with the course coordinator.

The use of mobile phones is prohibited during clinical sessions with patients (rounds in oncology division)

Course completion requirement: A qualifying test (final colloquium) at the end of the course is required for admission to the final exam. The qualifying test takes place electronically on Fridays following the completion of the course block; the link to the test becomes available at the end of the class. If the qualifying test is failed, a retake date is arranged individually; the retake takes the form of an oral exam (a set of 3 questions). Students are entitled to a maximum of two retake attempts.

If the final exam is failed, a retake date is scheduled during the retake exam session (or at another time with the Dean's approval). The retake exam is an oral exam consisting of four questions, including one clinical case study. Students are entitled to a maximum of two retake attempts.
The current schedule for a specific group and teaching block can be found on the website of the Department of Oncology at the UCK WUM (University Clinical Centre of the Medical University of Warsaw) – https://onkologiaakademicka.wum.edu.pl (under the "Education" >> "Schedule" tab).

Person responsible for teaching: Leszek Kraj, MD, PhD; email: leszek.kraj@wum.edu.pl or onkologia.csk@uckwum.pl
Contact the Department of Oncology at the UCK WUM: email: onkologia.csk@uckwum.pl Phone: 22 599 13 91

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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.

Orthopedics and Traumatology

1. IMPRINT	
Academic Year	2026/2027
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	Exam
Educational Unit / Educational Units	1. **Clinic of Orthopedics and Traumatology (1WE)**, Infant Jesus Teaching Hospital, 4 Lindlay'a St. 02-005 Warsaw, Poland Phone: 48 22 502 15 14; e-mail: klort@wum.edu.pl 2. **Department of Orthopaedics and Rehabilitation (2WG/ WLS 21)**, Międzyleski Szpital Specjalistyczny, 2 Bursztynowa St., 04-749 Warsaw, Poland (3rd floor, building "C") Phone: 48 22 473 52 18, e-mail: ortopedia@mssw.pl
Head of Educational Unit / Heads of Educational Units	1. Dr hab. Paweł Łęgosz, pHd M.D 2. Prof dr hab Artur Stolarczyk Ph.D, M.D
Course coordinator	1. Dr Łukasz Szelerski PhD, MD 2. Dr Piotr Stępiński, MD
Person responsible for syllabus	1. Dr Łukasz Szelerski PhD, MD 2. Piotr Stępiński, MD
Teachers	1. . Dr Łukasz Szelerski, Dr Aleksandra Sibilska, Dr Piotr Strzelczyk, Dr Artur Leśkow, Dr Sławomir Struzik, Dr Marcin Zgoda 2. Pawel Kolodziejski Ph.D, M.D, M.Sc., Tomasz Mitek Ph.D , M.D., Olaf Szuba M.D., Małgorzata Jopowicz M.Sc, Kuba Radzimowski M.D., Bartosz Maciąg M.D.

2. BASIC INFORMATION

Year and semester of studies	V year, 9 & 10 semester	Number of ECTS credits	3.0
FORMS OF CLASSES **Contacting hours with academic teacher**		**Number of hours**	**ECTS credits calculation**
Lecture (L)			
Seminar (S)		20	0.8
Classes (C)		40	1.6
e-learning (e-L)			
Practical classes (PC)			
Work placement (WP)			
Unassisted student's work			
Preparation for classes and completions		15	0.6

3. COURSE OBJECTIVES	
O1	Learning the principles of assessing, differential diagnosis and treatment of general orthopaedics, traumatic and non-traumatic disorders
O2	Learning the basics of an orthopedic physical examination
O3	Improve knowledge of the anatomy, physiology and pathophysiology of the musculoskeletal system

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:** *(in accordance with appendix to the Regulation of Minister of Science and Higher education from 26th of July 2019)* A.W1, A.W2, A.U3, A.U4, F.W1, pts 3&4, F.W2, F.W3, F.W4, F.W5, F.W10, F.W13 pt. 6, E.U.23, F.U.7, F.U.8
Knowledge – Graduate* knows and understands:	
A.W1	appropriate Polish and English anatomical, histological and embryological terminology
A.W2	structure of the human body in the topographical approach (upper and lower limb, chest, abdomen, pelvis, back, neck, head) and the functional approach (skeletal system, muscular system, urinary system, reproductive system, nervous system and sensory system, integumentary system)
F.W.2	specific paediatric surgery, including traumatology, otolaryngology, acquired defects and diseases in children which require surgical treatment
F.W1, 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: 3) limb and head diseases

	4) bone fractures and organ injuries
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.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.W.13, 6	causes, symptoms, principles of diagnosis and therapeutic treatment in the case of the most common diseases of the central nervous system in terms of: 6. diseases of the spine and spinal cord
Skills– Graduate* is able to:	
G.S1	Able to assess an x-ray with regards to the most typical fractures, especially long bones
A.U3	explain the anatomical background of the physical examination
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)
E.U23	propose a rehabilitation programme for the most common diseases
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

5. ADDITIONAL EFFECTS OF LEARNING *(non-compulsory)*	
Number of effect of learning	**Effects of learning in time**
Knowledge – Graduate knows and understands:	
G.W1	health assessment methods of an individual and a population, disease and medical procedure classification
G.W2	Understands the causes, typical symptoms, basis for diagnosis and treatment of the most common orthopedic conditions
G.W3	Understands basics and specifics of pediatric orthopedics, including trauma, congenital and acquired conditions which may require surgical treatment
Skills– Graduate is able to:	
S1	Student is able to carry out procedures following injuries (dressing or casting, cleaning and suturing a wound)
G.U7	recognise when examining a child the behaviours and symptoms suggesting that the child is a victim of violence
G.U3	interpret the incidence of diseases and disability
Social Competencies – Graduate is ready for:	

SC1	Establishing and maintain deep and respectful contact with patient
SC2	Being guided by the patient's well-being, putting it first

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

6. Classes

Form of class	Class contents	Effects of Learning
Seminars in the the form of E-learning webinars on MS TEAMS with corresponding materials available on wum.edu.pl	• Musculoskeletal structure and function • Orthopedic examination • Osteoarthritis • Non articular/soft tissue disorders • Developmental dysplasia of the hip • Congenital and developmental conditions • Joint arthroplasty • Orthopedic oncology • Distraction osteogenesis • Principles of fracture and healing • Fracture management • Upper limb injuries • Lower limb injuries • Spinal injuries • Hand injuries • Principles of pediatric trauma Shoulder conditions and injuries	A.W.1-2; F.W.1 pts 3 and 4; F.W.2 - 5; F.W 10; F.W.13 pt 6 A.U.3 A.U.4 E.U.23 F.U.7-8
Classes	1 – Practical classes of internal fixation of the long bones in the clinical simulation center 2- Practical classes of joint arthroscopy in the clinical simulation center 2 - Emergency duty including basic plaster casting and immobilisation lessons	A.W.1-2; F.W.1 pts 3 and 4; F.W.2 - 5; F.W 10; F.W.13 pt 6 A.U.3 A.U.4 E.U.23 F.U.7-8

7. Literature

Obligatory

"Current Diagnosis & Treatment in Orthopedics", H.B. Skinner, Lange, 2006

Materails from seminars and practical classes.

Supplementary

1. "Textbook of Orthopaedics", John Ebenezar, Anshan, 2006
2. "Blueprints Orthopedics" Grant Cooper, Blackwell Publishing, 2005
3. "Orthopaedics", Robert H. Fitzgerald, Mosby, 2002

8. Verifying the effect of learning

Code of the course effect of learning	Ways of verifying the effect of learning	Completion criterion
A.W1, A.W2, A.U3, A.U4, F.W1, pts 3&4, F.W2, F.W3, F.W4, F.W5, F.W10, F.W13	Completion of the entire e-learning course and attendance at all webinar classes. MCQ exam.	

pt. 6, E.U.23, F.U.7, F.U.8	In the event of an excused absence from class, the student is required to prepare a presentation on a topic related to the subject matter covered on the day the absence occurred.	

9. ADDITIONAL INFORMATION

Classes/webinars/seminars will take place between 9:00 and 15:00 at the Clinic of Orthopedics an Traumatology Lindley'a 4 campus or web
Missed classes/webinars/seminars will have to be completed with other group or need to be individually arranged with the coordinator.
Dep. 1WE classes:
Gr 1- 19.04-30.04.2027
Gr 4- 10.05-21.05.2027

Dep. 2WG/ WLS21 classes:
Gr 2- 26.04-07.05.2027
Gr 3-10.05-21.05.2027

Organization of Classes and the Examination Session

- The schedule of the examination session is determined and announced by the Dean, in consultation with the Pedagogical Councils, no later than four weeks from the beginning of the semester.
- The rules governing students' participation in classes, all deadlines for completing the course requirements, and the final deadline for course completion are determined by the course instructor, in consultation with the Dean, and announced no later than during the first class.
- A student is entitled to three examination attempts, of which the second and third attempts are resit examinations.

An examination held outside the official examination session may not conflict with the student's scheduled teaching activities**.**

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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.

Forensic medicine with elements of law

1. IMPRINT

Academic Year	2026/2027
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 Forensic Medicine, Oczki 1 St., Warsaw 02-007, Poland phone 22 628-89-75; fax 22 628-89-75 ext. 33 www.zms.wum.edu.pl e-mail: zms@wum.edu.pl forensic@wum.edu.pl
Head of Educational Unit / Heads of Educational Units	Aleksandra Borowska-Solonynko, MD PhD DSc, aleksandra.borowska-solonynko@wum.edu.pl
Course coordinator	Agnieszka Dąbkowska MD PhD, agnieszka.dabkowska@wum.edu.pl; tel. 22 628-89-75 ext. 18

Person responsible for syllabus	Agnieszka Dąbkowska MD PhD, agnieszka.dabkowska@wum.edu.pl;
Teachers	Agnieszka Dąbkowska, MD PhD, agnieszka.dabkowska@wum.edu.pl; Victoria Prokopowicz, MD victoria.prokopowicz@wum.edu.pl Marcin Fudalej MD PhD, marcin.fudalej@wum.edu.pl; Krzysztof Żak PhD, krzysztof.zak@wum.edu.pl

2. BASIC INFORMATION

Year and semester of studies	V year, IX semester	**Number of ECTS credits**	3.00

FORMS OF CLASSES **Contacting hours with academic teacher**	**Number of hours**	**ECTS credits calculation**
Lecture (L)		
Seminar (S)	25	1
Classes (C)	25	1
e-learning (e-L)		
Practical classes (PC)		
Work placement (WP)		
Unassisted student's work		
Preparation for classes and completions	25	1

3. COURSE OBJECTIVES

O1	Adaptation of medical knowledge for the purpose of the law.
O2	Understanding of death, thanatology, and goals of forensic autopsy.
O3	Understanding different mechanisms of natural and unnatural deaths.
O4	Forensic traumatology.
O5	Forensic toxicology.

06	Forensic genetics.
O7	Forensic aspects of interpersonal violence and child abuse.

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.W7	the legal obligations of a medical doctor regarding death confirmation
G.W12	the definition of unnatural death and sudden death, and the differences between trauma and injury
G.W13	the legal basis and rules of conduct for a medical doctor during the examination of the body at the crime scene and during medico-forensic examination of the body
G.W14	rules of forensic medicine diagnosis and the giving of opinions in cases concerning infanticide and reconstruction of the circumstances of a road accident
G.W15	the rules of forming opinions as an expert witness in criminal cases
G.W16	the rules of medico-forensic opinions regarding the ability to participate in legal processes and/or the biological effect of trauma and health loss
G.W18	the rules of collecting material for toxicological and hemogenetic testing
Skills– Graduate* is able to:	
G.U7	recognize behavior and symptoms indicating the possibility of violence against a child
G.U9	collect blood for toxicological tests and material for hemogenetic 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:	
K1	the rules and obligations applied to human cadavers G.W33
K2	issues related to serology and forensic genetics G.W35

K3	basics of forensic toxicology G.W36
Skills– Graduate is able to:	
S1	evaluate postmortem changes G.U28
S2	assess the effects of facial and skull injuries in terms of criminal and civil proceedings G.U30
Social Competencies – Graduate is ready for:	
SC1	
SC2	

6. Classes

Form of class	Class contents	Effects of Learning
Seminar	Introduction to Forensic Medicine. Educational contents: confirmation of death, medico-legal thanatology, post-mortem changes, forensic and hospital autopsy, procedures applied to bodies found at crime scene	G.W 7; G.W 12; G.W 13; G.W 15; G.W 33; G.W 37;
Seminar	Sudden natural death. Educational contents: sudden natural death due to different diseases, autopsy manifestations of different chronic diseases.	G.W 7; G.W 12; G.W15, G.W16; G.W 33; G.W 37;
Seminar	Asphyxia. Educational contents: mechanism of death, different types of asphyxia, autopsy findings in cases of asphyxia	G.W 33; G.W 37;
Seminar	Traumatology. Educational contents: different types of trauma and injuries (blunt force trauma, sharp force trauma, gunshot injuries, fire-related death, electrocution, hypothermia)	G.W 16; G.W 33; G.W 37;
Seminar	Traffic injuries. Educational contents: traffic injuries, injuries of various types of road participants (pedestrians, car occupants, car drivers, bicyclists, motorcyclists), modification of autopsy technique in car accident victims	G.W 14; G.W 33;
Seminar	Forensic toxicology. Educational contents: different types of toxins, toxicological examination in forensic medicine, autopsy findings in different types of fatal poisoning	G.W18; G.U9.
Seminar	Forensic genetics. Educational contents: basics of forensic genetics	G.W18; G.U9.
Seminar	Child and sexual abuse. Educational contents: injuries indicating child abuse, examination of a raped victim	G.W12; G.W13; G.W15; G.U7; G.U9;
Seminar	Human identification. Educational contents: methods used for identification of a person of unknown identity, examination of body remains	G.W 9; G.W 28; G.W 16; G.W 35;
Practical classes	Medico-legal examination of the dead body, autopsy findings in different types of deaths: due to diseases and trauma. Examination of the body of unknown identity, human remains. PMCT examination (post-mortem computed tomography) and evaluation of PMCT images in forensic point of view. Forming an opinion about cause and mechanism of death. Work with forms used during disaster victim identification.	G.U 9; G.U 28; G.W 15; G.W 37;

7. Literature

Obligatory

1. Handbook of Forensic Pathology V.J.M. DiMaio, S. E. Dana Taylor and Francis Group 2007.
2. Simpson's Forensic Medicine R. Shepherd, Arnold 2003

Supplementary

1. Encyclopedia of Forensic Sciences J.A.Siegel, P.J. Saukko, 2013 Academic Press
2. Forensic Analysis of the scull M.Y.Iscan, R.P. Helmer, Wiley-Liss

8. Verifying the effect of learning

Code of the course effect of learning	Ways of verifying the effect of learning	Completion criterion
G.W7; G.W12; G.W13; G.W14; G.W15, G.W16; G.W18; G.W33; G.W35; G.W36; G.W37;	Continuous assessment in the classroom - on seminars and practical classes, written reports, discussion.	Active participation in the class, 100% attendance (a maximum 3 days of absences during the course could be accepted, however absence on the seminars must be covered by writing an essay covering the topic of a seminar, and absence on autopsies (practical classes) - by assisting in additional autopsy after regular teaching hours. Positive result of the MCQ test.
		Assessment: 2.0 (failed) - Final test result less than 30 points. More than three days of absences during the course, no active participation in seminar classes or classes, lack of basic knowledge in the field of thanatology, toxicological and genetic diagnostics in forensic medicine. 3.0 (satisf.) - Final test result 30-34 points. The condition of completing the course is attendance at all classes, participation in exercises and seminars and demonstrating skills in the medical and forensic issues covered by the curriculum at the basic level. 3.5 (more than satisf.) - Final test result 35-38 points. The condition for obtaining the grade is attendance at all classes, participation in exercises and seminars, and demonstrating skills in medical and forensic issues covered by the curriculum at a level above elementary. 4.0 (good) - Final test result 39-42 points. Active participation in exercises and seminars and demonstrating the skills of practical application of knowledge in forensic and medical opinions. 4.5 (more than good) - Final test result 43-46 points. Active participation in exercises and seminars as well as skills in the practical application of knowledge in forensic medical opinions in high level. 5.0 (very good) - Final test result 47-50 points. Active participation in exercises and seminars and demonstrating the

		skills of practical application of knowledge in forensic and medical opinion in very high level.

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. All classes are held in Forensic Medicine Department facility at Oczki 1 St. in Warsaw.
2. Classes start at 8:30. A late arrival is considered 15 minutes past the starting time of the class.
3. For practical classes, the student must have his own apron and protective glasses or visor, street shoes are accepted.
4. The use of mobile phones or other recording devices during practical class **is strictly prohibited**.
5. A student can miss maximum three days of the course, however absence on each seminar **must be covered** by writing an essay covering the topic of a seminar, and absence on autopsy – by assisting in additional autopsy after regular teaching hours. Students can get credit and proceed to the final exam only after completing all of the Department's requirements. For three late arrivals, the student is obliged to make up an additional autopsy.
6. If a student's absences exceed the limitations listed above, they are required to take a complete course with another group.
7. Exam – 50-question MCQ (Multiple Choice Question) test during the winter exam session, in the university's computer room (address will be on the Department website after beginning the 2026/2027 academic year). Grading is listed above. A student has the right to two (2) make-up exams if they fail. The first make-up exam is a 50-question MCQ test in the university's computer room. The second make-up exam is a 50-question MCQ to be written in the Department of Forensic Medicine.
8. Examination grades are final, and we do not allow non-failing grades to be improved.
9. Any comments or complaints regarding the final test are considered up to 3 working days after the exam – a visit to the teacher must be arranged before.

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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.

OPHTHALMOLOGY

1. IMPRINT	
Academic Year	2026/2027
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 Ophthalmology 13 Sierakowskiego Str, 03-709 Warsaw Phone: 48 22 511 63 77; e-mail: klinika@spkso.waw.pl
Head of Educational Unit / Heads of Educational Units	Professor Jacek P. Szaflik MD, PhD
Course coordinator	Monika Łazicka-Gałecka, MD PhD e-mail: monika.lazicka-galecka@wum.edu.pl
Person responsible for syllabus	Monika Łazicka-Gałecka, MD, PhD e-mail: monika.lazicka-galecka@wum.edu.pl
Teachers	Professor Jacek P. Szaflik MD, PhD, FEBO Ewa Langwińska MD, PhD Justyna Izdebska MD, PhD Anna Zaleska-Żmijewska MD, PhD Michał Post, MD, PhD Anna Kurowska, MD, PhD Monika Udziela, MD, PhD Joanna Przybek-Skrzypecka MD, PhD, FEBO Monika Łazicka-Gałecka MD.PhD

2. BASIC INFORMATION			
Year and semester of studies	V year, winter and summer semester	**Number of ECTS credits**	2.00

FORMS OF CLASSES **Contacting hours with academic teacher**	**Number of hours**	**ECTS credits calculation**
Lecture (L)	0	
Seminar (S)	10	0,4
Classes (C)	40	1,6
e-learning (e-L)	0	
Practical classes (PC)	0	
Work placement (WP)	0	
Unassisted student's work		
Preparation for classes and completions	20	

3. COURSE OBJECTIVES	
O1	Gaining knowledge about pathophysiology, symptoms and signs, diagnostics tools and treatment methods for the most common eye disorders
O2	Acquiring the ability to perform Basic ophthalmologic examinations, diagnosing acute ophthalmological disorders and eye injuries
O3	Providing immediate first ophthalmological aid

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:** *(in accordance with appendix to the Regulation of Minister of Science and Higher education from 26th of July 2019)*
Knowledge – Graduate* knows and understands:	
F.W11	eye diseases, in particular: 1) treatment methods of the most common eye disorders, ophthalmological complications of systemie diseases with their ophthalmological symptomatology and proper procedures to be used in such cases,

	2) ophthalmological complications of systemie diseases with their ophthalmological symptomatology and proper procedures to be used in such cases; 3) surgical treatment methods of common eye diseases, 4) Basic groups of medicines used in ophthalmology, their adverse effects and interactions, 5) groups of medicines for general use causing complications, as well as ophthalmological contraindications and the respective mechanism;
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.W10 p.3	indications, contraindications and preparation of patients for particular types of imaging examinations and contraindications to the use of contrast agents;
F.W13 p.3	causes, symptoms, principles of diagnosis and therapeutic treatment in the case of the most common diseases of the central nervous system in terms of: cranial-cerebral injuries,
F.W14	basic issue related to transplantology, indications for the transplantation of permanently impaired organs and tissues, as well as the related procedures;
Skills– Graduate* is able to:	
F.U19	perform ophthalmic screening tests;
F.U20	recognise ophthalmic conditions that require an immediate specialistaid and provide initial, qualifiedaid in the case of physical and chemical eye injuries;
F.U3	observe the rules of asepsis and antisepsis;

** 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	
S2	
Social Competencies – Graduate is ready for:	
SC1	
SC2	

6. CLASSES		
Form of class	**Class contents**	**Effects of Learning**

Seminars	S1 - Introduction to ophthalmology. Principles of optics S2 - Diseases of conjunctiva and cornea S3 – Diseases of the ocular adnexae and the anterior segment disorders: eyelids, dry eye syndrome, cataract S4 – Diseases of the retina and vitreous. Diseases of uveal tract S5 – Ocularsurgery S6 – Glaucoma- diagnosis and treatment S7 – Ocular injuries. Emergency in ophthalmology S8 – Neuroophthalmology. Strabismus. S9 – Ocular manifestations of systemic diseases	F.W11 F.W11, F.W3 F.W11, F.W3 F.W11, F.W3, F.W10 p3 F.W11, F.W3,F.W14 F.W11, F.W3 F.W11, F.W3, F.W13 p.3 F.W11, F.W10 p.3 F.W11
Practical classes	C1-C9: students learn how to take an ophthalmology history; perform visual and ophthalmological examinations, including Visual acuity, color vision, comparative visual field, autokeratorefractometer, slit lamp examination, eye motility, pupillary reflexes, macular and optic disc optical coherence (OCT) test, anterior segment OCT; and ophthalmic first aid procedures: removal of a foreign body from the conjunctival sac, irrigation of the conjunctival sac, application of eye drops, ointments and bandages, practice in the ophthalmological simulation center	F.U20 F.U19 F.U3 F.W11 F.W3 F.W10 F.W14 F.W13

7. Literature

Obligatory

1. Materials from the seminars (available on-line at the Medical University of Warsaw e-learning platform)

Supplementary

1. „Ophthalmology at a Glance" Jane Olver, Lorraine Cassidy, ISBN: 978-0-632-06473-1, May 2005, ©2005, Wiley-Blackwell
2. Clinical Ophthalmology" by Jack J. Kanski, and Brad Bowling

8. Verifying the effect of learning

Code of the course effect of learning	Ways of verifying the effect of learning	Completion criterion
F.W11 F.W3 F.W10 p.3) F.W13 p.3) F.W14	Final exam – 100 multiple-choice questions exam. Only one excused absence is permitted. Exam date is common for all groups and takes place during the summer examination session, on a date determined by the Dean's Office.	threshold number of points: ≥94% (50-47 points) – **5.0** 93%-86% (46-43 points) – **4,5** 85%-76% (42-38 points) – **4.0** 75%-68% (37-34 points) – **3.5** 67%-60% (33-30 points) – **3.0** ≤59% (29-0 points) – **2.0**
F.U19, F.U20, F.U3,	Practical skills examination - the classes conclude with a practical and theoretical test with an assistant. Exemption from the test requires a positive assessment from the assistant and 100% attendance (even one excused absence is not permitted).	Positive evaluation of the teaching assistant

F.W11 F.W3 F.W10 p.3) F.W13 p.3) F.W14 F.U19, F.U20, F.U3,	Quiz and test available on-line at the Medical University of Warsaw e-learning platform	complete activity on e-learning platform

9. Additional information

Seminars are available on-line at the Medical University of Warsaw e-learning platform. Students need to read/listen to the seminars prior to the stationary classes begin.
Classes start the seminar at. 8.30 in the Conference Room on the first floor. The cloakroom for students is located on the 1st floor of the hospital
In special cases, the students will be informed about any organizational changes by e-mail by the starost of the group.
The contact with the Clinic is by e-mail (clinika@spkso.waw.pl or by phone: 22 5116377 (Clinic's office).
Only one absence is acceptable. More absences have to be worked off with a different group.
Medical clothing and changeable footwear are required during the classes. Medical clothing with short sleeves is recommended. In the case of a medical apron worn over private clothing, it should be closed. Jewelry (watches, rings, bracelets, etc.) is not allowed. Nails must not be painted and long hair should be pinned together. Protective gloves should be put on after washing / disinfecting hands immediately before contact with the patient.

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ATTENTION

The final 10 minutes of the last class of the block/semester/year should be allotted for students to fill out the Survey of Evaluation of Classes and Academic Teachers

Internal Medicine - Diabetology

1. IMPRINT	
Academic Year	2026/2027
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 Internal Medicine, Endocrinology and Diabetology, Medical University of Warsaw; Mazovian Brodnowski Hospital, 8 Kondratowicza St, 03-242 Warsaw, Poland
Head of Educational Unit / Heads of Educational Units	Professor Przemysław Witek MD, PhD
Course coordinator	Paweł Kuca MD, PhD, e-mail: pawel.kuca@wum.edu.pl
Person responsible for syllabus	Paweł Kuca MD, PhD, e-mail: pawel.kuca@wum.edu.pl
Teachers	Przemysław Witek, MD, PhD Roman Kuczerowski, MD, PhD Marek Kowrach, MD, PhD Agnieszka Wojciechowska – Luźniak, MD Paweł Kuca, MD, PhD Łukasz Działach, MD Joanna Sobolewska, MD Zuzanna Żak, MD

2. BASIC INFORMATION

Year and semester of studies	V year 9 & 10 semester	Number of ECTS credits	2.00
FORMS OF CLASSES **Contacting hours with academic teacher**		**Number of hours**	**ECTS credits calculation**
Lecture (L)		4	0.16
Seminar (S)		16	0.64
Classes (C)		10	0.40
e-learning (e-L)			
Practical classes (PC)			
Work placement (WP)			
Unassisted student's work			
Preparation for classes and completions		20	0.80

3. COURSE OBJECTIVES	
O1	Improve the skills of history taking and proper physical examination.
O2	Ability to conduct differential diagnosis and to use proper diagnostic path in diabetology
O3	Ability to recognize and treat life-threatening conditions in diabetology Ability to treat and monitor treatment of common types of diabetes

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:** E.W1, E.W7, E.W40, E.W41, E.U1, E.U3, E.U7, E.U12, E.U13, E.U14, E.U16, E.U18, E.U24, E.U38
Knowledge – Graduate* knows and understands:	
E.W1	environmental and epidemiological determinants of the most common illnesses;
E.W7	reasons, symptoms, diagnostic and treatment procedures of the most frequent internal diseases and their complications in adult patients and their complications: neuropathy, nephropathy, retinopathy, cardiovascular diseases

E.W40	theoretical and practical bases of laboratory diagnosis;
E.W41	capabilities and limitations of laboratory testing in emergencies;
G.K1	knows and understands principles of history taking and physical examination
Skills– Graduate* is able to:	
E.U1	collect medical history from adult patients; Take history and perform physical examination of patients with diabetes, collect medical history from adult patients , conduct a complete and targeted physical examination in adults, evaluate the general condition, the state of consciousness and awareness of a patient, assess and describe the patient's somatic and psychological states.
E.U3	conduct a complete and targeted physical examination in adults;
E.U7	evaluate the general condition, the state of consciousness and awareness of a patient;
E.U12	perform the differential diagnosis of the most common diseases in adults and children including metabolic disorders
E.U13	assess and describe the patient's somatic and psychological states; prepare and analyse clinical cases, keep a patient's medical records
E.U14	recognise immediate threats to life threatening conditions in diabetology
E.U16	plan diagnostic, therapeutic and preventive treatment in common type of diabetes
E.U18	propose the individualisation of applicable therapeutic guidelines and alternative treatment in the case of ineffectiveness or contraindications to standard therapy; present a patient case to other doctor, consult relevant abnormalities in laboratory and imaging tests, plan diagnostic, therapeutic and preventive treatment, propose the individualisation of applicable therapeutic guidelines and alternative treatment in the case of ineffectiveness or contraindications to standard therapy
E.U24	interpret laboratory test results with the identification of reasons for deviation; interpret laboratory tests and imaging tests in diabetes, interpret laboratory test results with the identification of reasons for deviation
E.U38	keep 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	
Skills– Graduate is able to:	
S1	
Social Competencies – Graduate is ready for:	

SC1	

6. Classes

Form of class	Class contents	Effects of Learning
bedside classes	Training of practical issues connected with making history, signs and symptoms assessment as well as diagnosis and treatment.	E.U1, E.U3, E.U7, E.U12, E.U13, E.U14, E.U16, E.U24, E.U38
Lectures	**Lectures:** 1. Clinical cases of acute complications in diabetes. 2. Clinical cases of rethinopathy, nephropathy and neuropathy. 3. Clinical examples of diabetic foot. 4. Clinical cases of diabetes in pregnancy.	E.W1, E.W7, E.W40, E.W41, E.U13, E.U14, E.U16, E.U18
Seminars	S1-Pathophysiological basis for glucose metabolism disorders classifications. Metabolic syndrome. S2- Diabetes type 2 and type 1-differences in pathophysiology. S3- Diet and physical activity in diabetes. S4- Goals of treatment for patient with diabetes S5- Insulin in the treatment for patients with diabetes : algorithms, insulin pumps S6- Hypoglycemic agents in the treatment of diabetes with introduction to new drugs. S7- Acute complications of diabetes . S8 -Chronic complications of diabetes –retinopathy and nephropathy. S9 -Chronic complications of diabetes – neuropathy and diabetic foot . S10-Cardiovascular diseases in diabetes . S11. Diabetes in specyfic situations: hospitalization, diabetes in pregnancy, elderly. 12. Common endocrinopaties in diabetology	E.W1, E.W7, E.W40, E.W41

7. Literature

Obligatory

1. Kumar and Clark's Clinical Medicine , 8e/9e (Kumar, Kumar and Clark's Clinical Medicine) by Parven Kumar
2. Harrison's Internal Medicine (20 th edition)

Supplementary

International Textbook of Diabetes Mellitus , 2 Volume Set 4 th edition by R.A. DeFronzo (Editor), e.Ferrannini (Editor), George Alberti (Editor) 2015

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.W7, E.W40, E.W41, G.K1, E.U1, E.U3, E.U7, E.U12, E.U13, E.U14, E.U16, E.U18, E.U24 ,E.U38	Active participation in all seminars and classes.	Obligatory attendance and active participation in all seminars and classes.

E.W1, E.W7, E.W40, E.W41, G.K1, E.U1, E.U3, E.U7, E.U12, E.U13, E.U14, E.U16, E.U18, E.U24 ,E.U38	Preparing a power-point presentations.	Presentation of case report.
	Execution of assigned tasks on the e-learning platform.	Execution of assigned tasks on the e-learning platform.
	Test at the end of the course .	3.0 (satisfactory).

9. Additional information

At the first day of the course we meet at the entrance of the clinic (The Department of Endocrinology, Diabetology and Internal Medicine – Kondratowicza Street 8, building C, 7th floor) at 8:00 a.m.
Then we present the detailed schedule of classes.
From Tuesday students present case reports indicated by the teacher.

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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.

1. IMPRINT	
Academic Year	2026/2027
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	Department of Gastroenterology and Internal Medicine (1WZ) Chair and Department of Gastroenterology and Internal Diseases SP CSK, 1A Banacha St., 02-097 Warsaw tel (+48 22) 599 28 38, fax (+48 22) 599 18 38, e-mail: klingast@wum.edu.pl Seminars - Block D, Ground Floor, Room no 23, at 8.00 every day. Practical Classes - at the Department, Block D, 3rd Floor.
Head of Educational Unit / Heads of Educational Units	Prof. dr hab. n. med. Adam Przybyłkowski
Course coordinator	Anna Mackiewicz-Pracka, MD PhD, e-mail: anna.mackiewicz@wum.edu.pl
Person responsible for syllabus	Anna Mackiewicz-Pracka, MD PhD, e-mail: anna.mackiewicz@wum.edu.pl
Teachers	Prof. dr hab. n. med. Adam Przybyłkowski Dr n. med. Anna Drobińska Dr n. med. Anna Mackiewicz-Pracka Dr n. med. Joanna Ligocka Dr n. med. Piotr Nehring Lek. Robert Kucharski Lek. Katarzyna Celińska- Dzikowska Lek. Aleksandra Budnicka-Borkowicz Lek. Krzysztof Hadrian Lek. Adam Czaplicki Lek. Jakub Pietrzak Lek. Karolina Szymańska-Cybulska Lek. Konrad Sosnowski Lek. Paweł Podgórski Lek. Adam Trzciński Lek. Paulina Żybul Lek. Maciej Małyszko Lek. Mikołaj Góral

	Lek. Michał Kowalski Lek. Katarzyna Wiejak Lek. Michał Rabenda Lek. Mateusz Wilk Lek. Małgorzata Landowska

2. BASIC INFORMATION

Year and semester of studies	5th year, 9th and 10th semester	**Number of ECTS credits**	2.00

FORMS OF CLASSES **Contacting hours with academic teacher**	**Number of hours**	**ECTS credits calculation**
Lecture (L)	4	0,16
Seminar (S)	16	0,64
Classes (C)	10	0,40
e-learning (e-L)		
Practical classes (PC)		
Work placement (WP)		
Preparation for classes and completions	20	0,80

3. COURSE OBJECTIVES

O1	The goal of the program is to acquaint students with the prevention diagnosis and treatment of the basic problems in gastroenterology.
O2	During this program all students have seminars and case studies/practical classes.
O3	During practical classes each group has an opportunity to take medical history, examine a patient and discuss all diagnostic tests (biochemical, imaging and endoscopic) with patient's physician. Also, all students have dedicated classes for the observation and participation during various diagnostic and therapeutic endoscopic procedures e.g. gastroscopy, ERCP, colonoscopy, sigmoidoscopy.

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:** *(in accordance with appendix to the Regulation of Minister of Science and Higher education from 26th of July 2019)* E. W7.3, E. W23; E. W24; E. W28, E. U1; D.U3, D.U7;E.U30, p. 1-7; E. U32
Knowledge – Graduate* knows and understands:	
EW7 pkt. 3, 9	reasons, symptoms, diagnostic and treatment procedures of the most frequent internal diseases and their complications in adult patients: 3) digestive system diseases, including oral cavity, oesophagus, stomach and duodenum, intestine, pancreas, liver, bile duct and gall bladder diseases.
E.W 23	environmental and epidemiological conditions of the most common cancers;
E.W24	basics of early detection of tumours and oncology screening principles;
E.W28	rules of palliative treatment of a patient in the terminal state
Skills– Graduate* is able to:	
E.U1	collect medical history from adult patients
D.U3	choose a treatment causing minimum social consequences to a sick person;
D.U7	involve a patient in the treatment process;
E.U30 p. 1-7	assist in the following procedures and medical treatments: 1) transfusion of blood preparations and blood derivatives, 2) pleural cavity drainage, 3) pericardium puncture, 4) peritoneal cavity puncture, 5) lumbar puncture, 6) fine-needle aspiration, 7) epidermal tests, intradermal and scarification tests, as well as interpret their results;
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	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 of the oral cavity, oesophagus, stomach and duodenum, intestine, pancreas, biliary tract and gallbladder
K2	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: liver.
Skills– Graduate is able to:	

S1	Assists in carrying out the following procedures and medical treatments: puncturing the peritoneal cavity.
S2	Assists in endoscopic procedures: gastroscopy, colonoscopy, sigmoidoscopy, ERCP, EUS.
Social Competencies – Graduate is ready for:	
SC1	Has the ability to recognize and differentiate the common gastrointestinal diseases in adults.
SC2	Has the ability to order the proper diagnostic tests and treatment.

6. Classes

Form of class	Class contents	Effects of Learning
Lecture	W1- Peptic ulcer disease, gastritis and stomach cancer	E. W7.3, E. W23; E. W24; E. W28, E. U1; D.U3, D.U7;E.U30, p. 1-7; E. U32, K1, K2, S1, S2, SC1, SC2
Lecture	W2- Inflammatory bowel diseases	
Seminar	S1 - Diagnostic Approach in Gastroenterology	
Seminar	S2- GI Bleeding	
Seminar	S3 - Peptic ulcer disease, gastritis and stomach cancer	
Seminar	S4 - Diverticular Disease	
Seminar	S5 - Diseases of the Oesophagus and GERD	
Seminar	S6- Diseases of the Gallbladder and Bile Duct	
Seminar	S7 - Functional Disorders of GI Tract	
Seminar	S8 - Diarrhea and Malnutrition	
Seminar	S9 - Acute Pancreatitis	
Seminar	S10 - Chronic Pancreatitis	
Seminar	S11 - Colorectal Cancer	
Seminar	S12 - Acute and Chronic Liver Disease	
Seminar	S13 – Pancreatic Tumor	
Seminar	S14 - Cirrhosis and Its Complications, Liver Transplantation	
Seminar	S15 - Liver Cancer	
Seminar	S16 – Gastrointestinal Endoscopy	
Practical Classes/Online Case studies	C1-5-Practical bedside classes with appointed teacher	

7. Literature

Obligatory

Harrison's Principles of Internal Medicine 20th Edition, Chapters on Gastroenterology and Diabetes
Supplementary
Harrison's Gastroenterology and Hepatology 3rd by Dan L. Longo, Anthony S. Fauci

8. Verifying the effect of learning

Code of the course effect of learning	Ways of verifying the effect of learning	Completion criterion
E. W7.3, E. W23; E. W24; E. W28, E. U1; D.U3, D.U7;E.U30, p. 1-7; E. U32, K1, K2, S1, S2, SC1, SC2	Active participation in all seminars and classes.	Successful completion of the seminars and classes
	Single choice test	

9. Additional information

Department of Gastroenterology and Internal Medicine website:
www.gastroenterologia.wum.edu.pl

Venue:
Department of Gastroenterology and Internal Medicine
SP CSK, 1A Banacha St.,
Seminars - Block D, Ground Floor, Room no 23, at 8.00 every day
Practical Classes - at the Department, Block D, 3rd Floor.

Abridged Rules of Classes in The Department of Gastroenterology and Internal Medicine:

Knowledge in anatomy, pathophysiology and pathology of gastrointestinal tract as well as credit in Introduction to Internal Medicine is required.

Punctuality to seminars and practical classes is obligatory.

Students are obligated to wear lab coats/scrubs, have stethoscope and student's ID on every classes.

In case of single excused absence student should attend the class in a form discussed with appointed teacher.

Detailed information about classes held in the Department of Gastroenterology and Internal Medicine are available on a board next to Department office. (SP CSK, Block D, 3rd Floor)

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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 - Nephrology

1. IMPRINT	
Academic Year	2026/2027
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 Nephrology, Dialysis and Internal Medicine UCK WUM 1a Banacha St. Warsaw 02-097 tel no. 22-599-2658 e-mail add.: nefrologia@wum.edu.pl
Head of Educational Unit / Heads of Educational Units	Professor Jolanta Małyszko
Course coordinator	Assoc. Prof. Longin Niemczyk, MD, PhD; tel. no. 22 599 1314; e-mail longin.niemczyk@wum.edu.pl
Person responsible for syllabus	Assoc. Prof. Longin Niemczyk, MD, PhD; tel. no. 22 599 1314; e-mail longin.niemczyk@wum.edu.pl

Teachers	Jolanta Małyszko, professor, PhD, MD Longin Niemczyk, associate professor, PhD, MD Aleksandra Rymarz, associate professor, PhD, MD Zuzanna Jakubowska, PhD, MD Małgorzata Kępska-Dzilińska, PhD, MD Marlena Kwiatkowska-Stawiarczyk, MD Michał Markowski, MD Wojciech Krasowski, MD Filip Wantoch – Rekowski, MD

2. BASIC INFORMATION

Year and semester of studies	V year /9th & 10th semester	**Number of ECTS credits**	2.00

FORMS OF CLASSES **Contacting hours with academic teacher**	**Number of hours**	**ECTS credits calculation**
Lecture (L)	4	0.16
Seminar (S)	16	0.64
Classes (C)	10	0.40
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	20	0.80

3. COURSE OBJECTIVES

O1	Gaining knowledge about diagnostic and therapeutic approach to selected disorders of the kidneys and urinary tract
O2	Theoretical and practical principles of renal replacement therapy (hemodialysis, peritoneal dialysis, kidney transplantation)

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:	
E.W1	environmental aspects and epidemiology of the most common diseases
E.W7 p. 5	Causes, clinical manifestation, diagnostic and therapeutic approach to the most common diseases of the kidneys and urinary tract and associated complications in adult population: Acute kidney injury and chronic kidney disease, glomerular diseases, interstitial diseases, renal cysts, nephrolithiasis, urinary tract infections, neoplasms of the urinary tract, specifically the urinary bladder and the kidney. Water-electrolyte disturbances and acid-base disturbances, dehydration, overhydration, electrolyte imbalance, acidosis and alkalosis
Skills– Graduate* is able to:	
E.U1	Conduct medical interview with an adult patient
E.U3	Conduct a complete and targeted physical examination of an adult patient
E.U12	Perform the differential diagnosis of the most common diseases in adults and children;
E.U13	Assess and describe the patient's somatic and psychological states;
E.U14	Recognize life-threatening conditions
E.U16	Plan diagnostic, therapeutic and prophylactic procedures
E.U17	Analyse the side effects of particular medicines and interactions between them;
E.U18	Propose the individualisation of applicable therapeutic guidelines and alternative treatment in the case of ineffectiveness or contraindications to standard therapy;
E.U20	Qualify patients for home and hospital treatment;
E.U21	Recognise the conditions in which life expectancy, functional patient state or preferences limit the treatment according to the guidelines for a given disease;
E.U24	Interpret laboratory test results and identify any abnormalities and their underlying causes
E.U29 p. 7	Perform the basic medical procedures, including: 7) male and female urinary bladder catheterisation, nasogastric tube placement, stomach lavage, enema,
E.U31	Interpret the pharmaceutical characteristics of medicinal products and critically assess the advertising materials regarding medicines;
E.U37	Identify patients in agony and confirm death;
E.U38	Keep a patient's medical records.

5. ADDITIONAL EFFECTS OF LEARNING *(non-compulsory)*	
Number of effect of learning	**Effects in the fields of:**
Knowledge – Graduate knows and understands:	
K1	D.W5 Basic principles of communication with the patient and their relatives; development of empathetic and trust-based relationship D.W6. The importance of verbal and non-verbal communication with the patient and the concept of trust-based interaction with the patient
K2	
Skills– Graduate is able to:	
S1	Can interpret laboratory test results and identifies the causes of abnormal results
S2	Can plan specialist consultations.
Social Competencies – Graduate is ready for:	
SC1	
SC2	

6. CLASSES		
Form of class	**Class contents**	**Effects of Learning**
Lectures	L1 Acute kidney injury L2 Chronic kidney disease	E.W1, E.W7
Seminars	S1 Introduction to nephrology - basic diagnostic tests. Diagnostic and therapeutic procedures for urinary tract infections S2 Acute kidney injury – diagnostic and therapeutic procedures S3 Chronic kidney disease – diagnostic and therapeutic procedures S4 Nephrotic syndrome vs nephritic syndrome - diagnosis and treatment of primary and secondary glomerulonephritis – when to perform a kidney biopsy? S5 Diabetic nephropathy - diagnosis and treatment S6 Kidney cancer and oncnephrology - diagnostics (should I perform a contrast-enhanced CT scan?) and complications of oncological treatment S7 Hematonephrology – anemia, myeloma kidney and TLS (tumor lysis syndrome) S8 When to request a nephrology consultation S9 Poisoning - glycol, methanol, paracetamol, non-steroidal anti-inflammatory drugs - diagnostic and therapeutic procedures S10 Types of renal replacement therapy - what for whom and why?	E.W1, E.W7
Clinical classes	C1 Acute kidney injury, chronic kidney disease C2 Glomerular diseases, tubulointerstitial nephritiis C3 Renal replacement therapy C4 Electrolyte and acid-base disorders, fluid management C5 Emergency and life-threatening conditions in nephrology	E.U1, E.U3, E.U12, E.U13, E.U14, E.U16, E.U17, E.U18, E.U20, E.U21, E.U24, E.U29, E.U31, E.U37, E.U38

7. Literature

Obligatory

Scott F. Gilbert & Daniel E. Weiner "National Kidney Foundation Primer on Kidney Diseases, 8th Edition"

Supplementary

www.uptodate.com

1. Overview of the management of acute kidney injury (AKI) in adults
2. Definition and staging criteria of acute kidney injury in adults
3. Etiology and diagnosis of prerenal disease and acute tubular necrosis in acute kidney injury in adults
4. Overview of the management of chronic kidney disease in adults
5. Chronic kidney disease (newly identified): Clinical presentation and diagnostic approach in adults
6. Definition and staging of chronic kidney disease in adults
7. Evaluating patients for chronic peritoneal dialysis and selection of modality
8. Kidney replacement therapy (dialysis) in acute kidney injury in adults: Indications, timing, and dialysis dose
9. Kidney transplantation in adults: Timing of transplantation and issues related to dialysis
10. Acute complications during hemodialysis
11. Glomerular disease: Evaluation and differential diagnosis in adults
12. Isolated and persistent glomerular hematuria in adults
13. Overview of the classification and treatment of rapidly progressive (crescentic) glomerulonephritis
14. Overview of heavy proteinuria and the nephrotic syndrome
15. Pathophysiology and treatment of edema in adults with the nephrotic syndrome
16. Treatment and prevention of hyperkalemia in adults
17. Causes and evaluation of hyperkalemia in adults
18. Etiology and evaluation of hypernatremia in adults
19. Treatment of hypernatremia in adults
20. Manifestations of hyponatremia and hypernatremia in adults
21. Causes of hypotonic hyponatremia in adults
22. Diagnostic evaluation of adults with hyponatremia
23. Autosomal dominant polycystic kidney disease (ADPKD) in adults: Epidemiology, clinical presentation, and diagnosis
24. Autosomal dominant polycystic kidney disease (ADPKD): Treatment

Autosomal dominant polycystic kidney disease (ADPKD): Extrarenal manifestations

8. Verifying the effect of learning

Code of the course effect of learning	Ways of verifying the effect of learning	Completion criterion
E.U1, E.U3, E.U12, E.U13, E.U14, E.U16, E.U17, E.U18, E.U20, E.U21, E.U24, E.U29, E.U31, E.U37, E.U38	Assessment during clinical classes, participation in clinical rounds.	
E.W1, E.W3	Final oral completion	At least 50% correct answers. Detailed information will be given at the beginning of the course.

9. Additional information

The course in Nephrology takes place Monday – Friday at the Department of Nephrology, Dialysis and Internal Medicine, block D, floor 6, CSK UCK WUM 1a Banacha Street, Warsaw 02-097

Lectures:

1. 03 November 2026; 14^{50}-16^{20}; in-person: Olszewski Hall (Faculty of Pharmacy bldg.) 1 Banacha St.
2. 04 November 2026; 14^{50}-16^{20}; in-person: Olszewski Hall (Faculty of Pharmacy bldg.) 1 Banacha St.

Seminars:

8^{00}-8^{50} and 11^{35}-13^{00}

Seminars are held in the Department of Nephrology, Dialysis and Internal Medicine library UCK WUM Hospital on Banacha 1a Street

Clinical classes:
9^{00} -11^{30} (incl. 15 min. break)

Students must have their own medical scrubs (preferably) or lab coat, stethoscope, student's ID, shoes.
Absence (only one is permitted) can be made up for in one of the following manners: during duty at our Department, during course with another group of students or as an oral assessment of the seminar topic from the day of absence.
In the event of more absences the student has to take the course with another group of students. In certain circumstances the final decision depends on the Head of our Department.

Course coordinator: Assoc. Prof. Longin Niemczyk, tel. no. 22 599 1314, e-mail address: longin.niemczyk@wum.edu.pl

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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 – ENDOCRINOLOGY

1. IMPRINT	
Academic Year	2026/2027
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 Internal Diseases and Endocrinology Banacha 1a, 02-097 Warsaw Tel.: (+48 22) 599 29 75, (+48 22) 599 26 75 Faks: (+48 22) 599 19 75 e-mail: endosek@wum.edu.pl **http: /endokrynologia.wum.edu.pl/**
The head of unit	Prof. Urszula Ambroziak MD, PhD
Course coordinator	Michal Popow MD. PhD
Person responsible for syllabus	MICHAŁ POPOW MD, PhD tel. 22 599 2877 7D, room 767; tel: 22 599 2877 or 2975 Admission hours for students Tuesdays and Thursdays: 11.00-12.30

Teachers	AMBROZIAK URSZULA PROF. MD, PhD BEDNARCZUK TOMASZ PROF. MD, PhD BOBROWCZ MAŁGORZATA MD PhD GÓRALSKA MAGDALENA MD, PhD KUŚ ALEKSANDER MD, PhD PACHUCKI JANUSZ MD, PhD POPOW MICHAŁ MD, PhD ROSŁON MAREK MD, PhD SKOWROŃSKA-SZCZEŚNIAK ANNA MD, PhD ZGLICZYŃSKI STANISŁAW MD

2. BASIC INFORMATION

Year and semester of studies	V year, IX & X semester	**Number of ECTS credits**	2.00

FORM OF CLASSES	**Number of hours**	**Calculation of ECTS credits**
Contacting hours with academic teacher		
Lecture (L)	4	0,16
Seminar (S)	16	0,64
Classes (C)	10	0,40
e-learning (e-L)		
Practical classes (PC)		
Work placement (WP)		
Unassisted student's work		
Preparation for classes and completions	14	0,56
e-learning (e-L)	6	0,24

3. COURSE OBJECTIVES

O1	To familiarize students with the most common diseases of the endocrine glands, their course, diagnosis, diagnosis, differentiation and therapeutic management.
O2	Preparation students for final exams in internal medicine.
O3	Checking the skills and knowledge of students in endocrinology

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 time** *(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.W1)	environmental and epidemiological determinants of the most common illnesses;
G.K2 (E.W7 p. 4)	reasons, symptoms, diagnostic and treatment procedures of the most frequent internal diseases and their complications in adult patients: 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,
Skills– Graduate* is able to:	
G.S1	collect medical history from adult patients;
G.S2 (E.U1)	conduct a complete and targeted physical examination in adults;
G.S3	evaluate the general condition, the state of consciousness and awareness of a patient;
G.S4 (E.U12)	perform the differential diagnosis of the most common diseases in adults and children;
G.S5 (E.U24)	interpret laboratory test results with the identification of reasons for deviation;
G.S6 (E.U38)	keep a patient's medical records.

** In the appendices to the Ordinance of the Minister of Science and Higher Education of July 26, 2019, there is a mention of a "graduate" and not a student*

5. ADDITIONAL EFFECTS OF LEARNING *(non-compulsory)*	
Number of effect of learning	**Effects of learning in time**
Knowledge – Graduate knows and understands:	
K1	Epidemiological conditions of the most common diseases of the endocrine glands
K2	Understanding pathomechanisms leading to endocrine disease and, on this basis, searching for potential ways to inhibit or reverse them.
K3	Understanding of therapeutic mechanisms used in endocrinology in selected disease entities.

Skills– Graduate is able to:	
S1	Perform anamnesis and physical examination and differential diagnosis, interpret the results of additional tests, perform diagnostic tests and properly record
Social Competencies – Graduate is ready for:	
SC1	establishing and maintaining deep and respectful contact with the patient, as well as showing understanding for differences in worldviews and cultures
SC2	act in the best interest of the patient
SC3	taking actions towards the patient based on ethical principles, with awareness of social conditions and limitations resulting from the disease
SC4	compliance with medical confidentiality and patient rights
SC5	noticing and recognizing one's own limitations and making self-assessment of educational deficits and needs

6. CLASSES

Form of class	Class contents	Effects of Learning
The final tests	Checking students' knowledge, discussing questions and clarifying doubts about them	E.W1.,E.W7.
Seminars	Discussing the most common endocrine diseases, their pathogenesis, diagnosis and therapy	E.W1.,E.W7., E.U1., E.U3., E.U7., E.U12., E.U24.
Practical classes	Presentation of endocrine patients by assistants	E.W1.,E.W7., E.U1., E.U3., E.U7., E.U12., E.U24.
Presentation of cases by lecturers	Presentation of cases of endocrine patients	E.W1.,E.W7., E.U1., E.U3., E.U7., E.U12., E.U24.
Presentations of patients by graduates	Presentation and discussion of endocrine patients by graduates	E.W1.,E.W7., E.U1., E.U3., E.U7., E.U12., E.U24.
Discussion of a clinical case by the student - homework	Detailed reference to the given case and answers to the questions asked on the e-learning platform	E.W1.,E.W7., E.U1., E.U3., E.U7., E.U12., E.U24.

7. LITERATURE

Obligatory:

Basic & Clinical Endocrinology ed FS Greenspan, DG Gardner Harrison’s Principles of Internal Medicine

Supplementary

8. VERIFYING THE EFFECT OF LEARNING		
Code of the course effect of learning	**Ways of verifying the effect of learning**	**Completion criterion**
B.W1, B.W2, B.W22, B.W25, C.W51, F.W9. F.W11	1. Final written test - Multiple-choice test - 20 questions assessed on a 0-100% scale The student receives 1 point for each correct answer. The maximum possible number of points from the final test depends on the type of questions and the number of correct answers to each of them in a given test, therefore it may be variable and differ for subsequent groups of students. The minimum number of correct answers to pass the final test is 50%. Passing the final test is a required condition for successfully passing the entire block.	pass threshold - above 50% grade for achievement (3) - 51-64% (3.5) - 65-70% good grade (4) - 71-85% (4.5) - 85-89% very good rating (5) - 90-100%

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)*

Attendance at all classes and seminars is mandatory. In case of absence, the student will be asked to join the next group. If this is not possible, the student will be asked to answer 4 questions about the information presented in each of the missed seminars. One must answer at least three out of four (for each of missed seminar) to pass.
Two approaches to the final test are allowed. In the case of obtaining two negative grades, the student will not receive a credit.
In the event of an unsatisfactory grade, the student is entitled to a second date, i.e. another credit, before his / her assistant with whom he / she was taking classes.

The weekly cycle of classes consists of 20 seminars and 10 hours of practical classes .

The content of the seminars is available on the website: https://e-learning.wum.edu.pl/
S1. Neurendocrinology. Hypopituitarism
S2. Active and non-active pituitary adenomas
S3. Primary hyperthyroidism and hypothyroidism
S4. Nodular disease of the thyroid gland
S5. Adrenal insufficiency
S6. Cushing's syndrome, hyperandrogenism, hyperaldosteronism.
S7. Neuroendocrine tumors and multi-glandular neoplastic syndromes
S8. Disorders of parathyroid function and calcium-phosphate metabolism
S9. Obesity and lipid disorders
S10. Emergences in endocrinology

Two lectures will be presented :

1. 12 JAN 2027 MS Teams
2. 19 JAN 2027 MS Teams

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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.

Neurosurgery

1. IMPRINT	
Academic Year	2026/2027
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 Neurosurgery (WLS26) – Medical University of Warsaw 80 Cegłowska St., 01-809 Warsaw, Poland Phone: +48 22 -8350005; fax: +48 22-865-6057 e-mail: neurochirurgia@bielanski.med.pl
Head of Educational Unit / Heads of Educational Units	Radosław Michalik MD PhD
Course coordinator	Ewa Szczepek Assoc. prof MD PhD, e-mail: ewa.szczepek@wum.edu.pl
Person responsible for syllabus	Radosław Michalik MD PhD, e-mail Radoslaw.michalik@wum.edu.pl
Teachers	Michalik Radosław Adrianna Głogowska Ryszard Twarkowski Daniel Długosz Tomasz Wójcikiewicz Andrzej Styk Illia Harulia

2. BASIC INFORMATION			
Year and semester of studies	Year 5, Semester 10	**Number of ECTS credits**	2.00

FORMS OF CLASSES **Contacting hours with academic teacher**	**Number of hours**	**ECTS credits calculation**
Lecture (L)		
Seminar (S)	10	0.40
Classes (C)	20	0.80
e-learning (e-L)		
Practical classes (PC)		
Work placement (WP)		
Unassisted student's work		
Preparation for classes and completions	20	0.80

3. COURSE OBJECTIVES	
O1	To get acquainted with medical issues in the diagnosis and therapeutic methods in Neurosurgical Department.
O2	Acquiring additional knowledge and competence to solve neurosurgical problems.
O3	Obtaining additional competence in diagnosis and therapy.

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:** *(in accordance with appendix to the Regulation of Minister of Science and Higher education from 26th of July 2019)*
Knowledge – Graduate* knows and understands:	
F.W13 p. 1-6	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) tumors of the central nervous system, 6) diseases of the spine and spinal cord
F. W15	principles of suspecting and recognising the brain death
Skills– Graduate* is able to:	
F.U22	assess an conscious and unconscious patient according to the international point scales
F.U3	observe the rules of asepsis and antisepsis
F.U12	monitor perioperative care with the aid of basic vital sign
F.U21	assess an unconscious patient according to the international point scales

** 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	
S2	
Social Competencies – Graduate is ready for:	
SC1	
SC2	

6. Classes

Form of class	**Class contents**	**Effects of Learning**
Seminars Classes	S1 – Seminar 1. Topic: Introduction of Neurosurgical Department. Intracranial volume – pressure relationships. Monro – Kellie rule. Symbol of learning outcome/s: W1 C1-Practical Class 1. Topic: Case presentations and neurosurgical symptoms intracranial volume – pressure relationships.	F.W13 p. 1-6, F.W15 F.U3, F.U12, F.U21, F.U22

	Symbol of learning outcome/s: W1, U1, U2 S2 – Seminar 2. Topic: Neurotraumatology. Symbol of learning outcome/s: W2, W7 C2-Practical Class 2. Topic: Case presentations craniocerebral injuries. Neurosurgical Symptoms. Diagnostic procedures. Treatment S3 – Seminar 3. Topic: Neurooncology in Neurosurgery. Symbol of learning outcome/s: W3 C3-Practical Class 3. Topic: Case presentations. Neurosurgical Symptoms. Diagnostic procedures. Treatment Neurooncology in Neurosurgery. Symbol of learning outcome/s: W3, U1,U2,U3. S4 – Seminar 4. Topic: Vascular Diseases in Neurosurgery. Intracranial bleeding. Intracranial Aneurysm. Angiomas (AVMs). Diagnostic procedures. Surgical vs endovascular aspects of treatment in Neurosurgery. Symbol of learning outcome/s: W4 C4-Practical Class 4. Topic: Case presentations. Neurosurgical Symptoms. Diagnostic procedures. Treatment Vascular Diseases in Neurosurgery. Symbol of learning outcome/s: W4, U1,U2,U3,U4. S5 – Seminar 5. Topic: Disorders of the circulation of cerebrospinal fluid - spinal /Hydroceplahus/. Symbol of learning outcome/s: W5 C5-Practical Class 5. Topic: Case presentations. Diagnosis and treatment options hydrocephalus. Symbol of learning outcome/s: W5, U2, U3 S6 – Seminar 6. Topic: Degeneration disc disease. Degenerative spine disease. Recapitulation Head of the Department. Symbol of learning outcome/s: W6 C6-Practical Class 6. Topic: Case presentations degeneration disc disease and degenerative spine disease. Pathology and treatment neurosurgery. Symbol of learning outcome/s: W6, U2	

7. LITERATURE
Obligatory
Neurology and Neurosurgery Illustrated, Kenneth W Lindsay, Ian Bone, Geraint Fuller, Churchill Livingstone/ Elsevier, 5 Edition.
Supplementary

8. VERIFYING THE EFFECT OF LEARNING		
Code of the course effect of learning	**Ways of verifying the effect of learning**	**Completion criterion**
F.W13 p. 1-6, F.W15 F.U3, F.U12, F.U21, F.U22	Practical skills examination	Positive evaluation of the teaching assistant
F.W13 p. 1-6, F.W15 F.U3, F.U12, F.U21, F.U22	Final test (10 MCQ test questions).	threshold number of points - 10 good answers

9. ADDITIONAL INFORMATION

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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 – Nephrology

1. IMPRINT	
Academic Year	2026/2027
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 Pediatrics and Nephrology 1WI Children's Hospital 63A Żwirki i Wigury St. 02-091 Warsaw Phone: 48 22 317 96 53
Head of Educational Unit / Heads of Educational Units	Professor Małgorzata Mizerska-Wasiak MD PhD
Course coordinator	Jarosław Sołtyski MD PhD e-mail: jsoltyski@wum.edu.pl
Person responsible for syllabus	Jarosław Sołtyski MD PhD e-mail: jsoltyski@wum.edu.pl

Teachers	Małgorzata Pańczyk- Tomaszewska MD PhD Małgorzata Mizerska- Wasiak MD PhD Maria Daniel MD Anna Kokoszka MD Anna Ozimek MD Piotr Skrzypczyk MD PhD Jarosław Sołtyski MD PhD Agnieszka Szmigielska MD PhD Agnieszka Turczyn MD

2. BASIC INFORMATION

Year and semester of studies	V year, 9 & 10 semester	**Number of ECTS credits**	2.00

FORMS OF CLASSES **Contacting hours with academic teacher**	**Number of hours**	**ECTS credits calculation**
Lecture (L)	5	0.2
Seminar (S)	10	0.4
Classes (C)	15	0.6
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	The aim of the course is to achieve and preserve knowledge about the principles of the assesment, differrential diagnosis and treatment of the disease within the following areas of Pediatrics: Pediatric Nephrology
O2	
O3	

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:** *(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.W1	Knowledge of environmental and epidemiological circumstances of the most often seen diseases within the following areas of Pediatrics: Pediatric Nephrology/ E.W1: environmental and epidemiological determinants of the most common illnesses
G.K2/ E.W3, 6	Basic knowledge of pediatric nephrology: development, structure and function of kidneys, structural abnormalities of urinary tract, urinary tract infection, nephrotic syndrome and glomerulonephritis, nephropaties: SLE, Henoch-Schonlein syndrome and others, urolithiasis, hemolytic- uremic syndrome, acute kidney injury, chronic kidney disease with renal replacement therapy/ E.W3, 6: causes, symptoms, principles of diagnosis and therapeutic treatment of the most common diseases in children: 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
Skills– Graduate* is able to:	
G.S1	Ability to make a diagnosis, based on child's mediacal history, findings in physical examination along with additional tests and imagines
G.S2	Ability to differentiate abnormal findings in anamnesis and physical examination within following areas of Pediatric Nephrology
E.U2	collect medical history from a child and its family
E.U4	conduct a physical examination of children of any age
E.U7	evaluate the general condition, the state of consciousness and awareness of a patient
E.U9	compare percentile charts with anthropometric and blood pressure measurements
E.U10	evaluate the grade of sexual development
E.U12	perform the differential diagnosis of the most common diseases in adults and children
E.U13	assess and describe the patient's somatic and psychological states
E.U14	recognise immediate threats to life
E.U15	recognise states under the influence of alcohol, drugs and other stimulants
E.U16	plan diagnostic, therapeutic and preventive treatment
E.U17	analyse the side effects of particular medicines and interactions between them
E.U18	propose the individualisation of applicable therapeutic guidelines and alternative treatment in the case of ineffectiveness or contraindications to standard therapy
E.U20	qualify patients for home and hospital treatment

E.U21	recognise the conditions in which life expectancy, functional patient state or preferences limit the treatment according to the guidelines for a given disease
E.U24	interpret laboratory test results with the identification of reasons for deviation
E.U25	use feeding protocols (enteral and parenteral)
E.U27	qualify a patient for vaccinations
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	Importance of profound analysis of pediatric patient problems
K2	Use of objective sources of medical knowledge/ sciences
Skills– Graduate is able to:	
S1	Have a good contact with patients and parents
S2	Understand different background of patients and their parents
Social Competencies – Graduate is ready for:	
SC1	Cooperate in a group of professionals in a proces of diagnosis and treatment
SC2	Be responsible for decisions in a therapeutic process

6. Classes

Form of class	Class contents	Effects of Learning
Lectures	Congenital anomalies of the kidney and the urinary tract Kidney involvement in systemic disease Urolithiasis	E.W1, E.W3 p. 6
Seminars	Acute kidney injury Chronic kidney disease Nephrotic syndrome Glomeruloneephritis CAKUT Hypertension Urinary bladder disurbances Hematuria Hemolytic uremic syndrome Laboratory investigation and diagnostic imaging in Nephrology	E.W1, E.W3 p. 6, G.S1, G.S2, E.U2, E.U4, E.U7, E.U9, E.U10, E.U12, E.U13, E.U14, E.U15, E.U16, E.U17, E.U18, E.U20, E.U21, E.U24, E.U25, E.U27, E.U32 During the seminars teachers will check understanding of the topic problems

Classes	Practical bedside classes with appointed teacher	G.S1, G.S2, E.U2, E.U4, E.U7, E.U9, E.U10, E.U12, E.U13, E.U14, E.U15, E.U16, E.U17, E.U18, E.U20, E.U21, E.U24, E.U25, E.U27, E.U32 Evaluate the practical knowledge of physical examination and analysis of symptoms

7. Literature

Obligatory

Nelson Essentials of Pediatrics, 8th ed, Marcdante K, Kliegman RM, Elsevier Health Sciences, 2018

Supplementary

Nelson Textbook of Pediatrics, 20th ed, Kliegman RM W.B. Saunders Company 2015

8. Verifying the effect of learning

Code of the course effect of learning	Ways of verifying the effect of learning	Completion criterion
G.S1, G.S2, E.U2, E.U4, E.U7, E.U9, E.U10, E.U12, E.U13, E.U14, E.U15, E.U16, E.U17, E.U18, E.U20, E.U21, E.U24, E.U25, E.U27, E.U32	Active participation in lectures and seminars Oral colloquium or test	At least satisfactory acquisition of outcomes corresponding to the subject
	Bedside classes	At least satisfactory acquisition of abilities in bedside classes according to the direct teacher's assessment

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)*

White coat and footwear change is required during bedside classes

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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 Hematology and Oncology

1. IMPRINT	
Academic Year	2026/2027
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	Department of Oncology, Pediatric Hematology, Transplantology and Pediatrics WUM (1WG) Children's Hospital Zwirki i Wigury 63A 02 091 Warszawa Phone: 48 22 317 96 21, 20
Head of Educational Unit / Heads of Educational Units	Prof. Paweł Łaguna MD PhD
Course coordinator	Prof. Iwona Malinowska MD PhD e-mail: iwona.malinowska@wum.edu.pl
Person responsible for syllabus	Prof. Iwona Malinowska MD PhD e-mail: iwona.malinowska@wum.edu.pl
Teachers	Iwona Malinowska MD PhD Katarzyna Pawelec MD PhD Magdalena Wołowiec MD PhD Bartosz Chyżyński MD PhD

2. BASIC INFORMATION			
Year and semester of studies	5th year; 9 &10 semester	**Number of ECTS credits**	2.00
FORMS OF CLASSES **Contacting hours with academic teacher**		**Number of hours**	**ECTS credits calculation**
Lecture (L)		5	0,2
Seminar (S)		10	0,4
Classes (C)		15	0,6
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	The aim of the course is to achieve knowledge about the principles of the assessment, differential diagnosis and treatment of hematological and oncological disorders of childhood.
O2	
O3	

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:** *(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	Knowledge of environmental and epidemiological circumstances of the most often seen diseases within the following areas of pediatric hematology and oncology

G.K2	Basic knowledge of pediatric hematology and oncology: anemia in children, hemophilia, lymphadenopathy, hemorrhagic diathesis, thrombosis in children, neutropenia in children, leukemia, solid tumors in children, transfusion of blood products
E.W1	environmental and epidemiological determinants of the most common illnesses
E.W3, 4	causes, symptoms, principles of diagnosis and therapeutic treatment of the most common diseases in children: 4. anaemia, bleeding diatheses, marrow failure, cancers in children, including solid tumours typical of childhood
E.W4	the following terms: battered child, sexual harassment, mental retardation, conduct disorders: psychoses, addictions, eating and excretion disorders in children
Skills– Graduate* is able to:	
G.S1	Ability to make a diagnosis based on child's medical history, findings in physical examination along with additional tests and imaging
G.S2	Ability to differentiate abnormal findings in anamnesis and physical examination within following areas of pediatric hematology and oncology.
E.U2	collect medical history from a child and its family
E.U4	conduct a physical examination of children of any age
E.U6	conduct an explanatory examination of hearing and the field of vision, as well as an otoscopic examination
E.U7	evaluate the general condition, the state of consciousness and awareness of a patient
E.U9	compare percentile charts with anthropometric and blood pressure measurements
E.U10	evaluate the grade of sexual development
E.U12	perform the differential diagnosis of the most common diseases in adults and children
E.U20	qualify patients for home and hospital treatment
E.U24	interpret laboratory test results with the identification of reasons for deviation
E.U27	qualify a patient for vaccinations

** 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
Lectures	Aquired aplastic anemia Hematopoietic stem cell transplantation in children Bone marrow insufficiency	E.W.1 E.W.3 E.W.4
Seminars	Anemia in children Lymphadenopathy Hemophilia Other hemorrhagic diathesis in children Lymphoma in children Leukemia in children Thrombosis in children Neutropenia in children Solid tumors in children Hemophagocytic syndrome in children	E.W.1 E.W.3 E.W.4
Bedside classes	Training of practical, signs and symptoms assessment as well as diagnosis in pediatric hematology and oncology	E.U.2, E.U.4, E.U.6, E.U.7, E.U.9, E.U.10, E.U.12 E.U.20 E.U.24 E.U.27

7. Literature

Obligatory

1. Nelson Essentials of Pediatrics, 9th ed, Marcdante K, Kliegman RM; W.B. Saunders Company, 2022
2. Illustrated Text book of Peadiatrics, 6th ed, Lissauer T, Clayden G; Mosby Ltd., 2021

Supplementary

1. Nelson Textbook of Pediatrics, 22nd ed, Kliegman, Stanton, St.Geme, Schor; W.B. Saunders Company, 2024

8. Verifying the effect of learning

Code of the course effect of learning	Ways of verifying the effect of learning	Completion criterion
E.W.1 E.W.3 E.W.4	Active participation in seminars, lecture, rounds in oncology division. Written test	At least satisfactory acquisition of outcomes corresponding to the subject
E.U.2, E.U.4, E.U.6, E.U.7, E.U.9, E.U.10, E.U.12, E.U.20, E.U.24, E.U.27	Bedside classes	At least satisfactory acquisition of abilities in bedside classes according to the direct teacher's assessment.

9. ADDITIONAL INFORMATION
the number of acceptable tries for passing a subject -3

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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.

Obstetrics and gynecology

1. IMPRINT	
Academic Year	2026/2027
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	**(1W61)** II Department of Obstetrics and Gynecology, MUW 2 Karowa St., 00-315 Warsaw Phone: 48 22 59 66 421, e-mail: agnieszka.paduch@szpitalkarowa.pl
Head of Educational Unit / Heads of Educational Units	Prof. Krzysztof Czajkowski, MD, PhD **(1W61)**
Course coordinator	Piotr Świderczak, MD piotr@swiderczak.com.pl **(1W61)** Joanna Kacperczyk-Bartnik, MD, PhD joanna.kacperczyk-bartnik@wum.edu.pl **(1W61)** Aleksandra Urban, MD aleksandra.urban@wum.edu.pl **(1W61)** Paweł Bartnik, MD, PhD bartnik.pawel@gmail.com **(1W61)**

Person responsible for syllabus*)*	**(1W61)** Joanna Kacperczyk-Bartnik, MD, PhD joanna.kacperczyk-bartnik@wum.edu.pl
Teachers	**(1W61)** Prof. Krzysztof Czajkowski, MD PhD; Assoc. Prof. Jacek Sieńko, MD PhD; Prof. Ewa Romejko-Wolniewicz, MD PhD; Assoc. Prof. Justyna Teliga-Czajkowska, MD PhD; Paweł Bartnik, MD PhD; Magdalena Broś-Konopielko, MD PhD; Agnieszka Dobrowolska-Redo, MD PhD; Joanna Kacperczyk-Bartnik, MD PhD; Joanna Kuran-Ohde, MD Phd; Dariusz Madajczak, MD PhD; Joanna Piechota, MD PhD; Hanna Biczysko-Sługocka MD; Agata Bobowska MD; Grzegorz Garus MD; Zuzanna Handziuk, MD; Ewa Janowska, MD; Klaudia Klicka, MD; Dominika Krasuska MD; Marek Kucharski MD; Kinga Pospiech MD; Dominika Pykało-Gawińska MD; Natalia Sroka-Ostrowska MD; Piotr Świderczak MD; Karolina Tomaszewska-Mikut MD; Aleksandra Urban, MD; Justyna Urbaniak, MD; Małgorzata Wieteska, MD; Monika Jarlińska-Tomaszczyk, MD; Karolina Tomaszewska-Mikut, MD; Agata Pisula-Zaręba, MD;

2. BASIC INFORMATION

Year and semester of studies	V year, summer semester	**Number of ECTS credits**	9.00

FORMS OF CLASSES **Contacting hours with academic teacher**	**Number of hours**	**ECTS credits calculation**
Lecture (L)		
Seminar (S)	20	0.80
Classes (C)	120	4.80
e-learning (e-L)		
Practical classes (PC)		

Work placement (WP)		
Unassisted student's work		
Preparation for classes and completions	85	3.40

3. COURSE OBJECTIVES	
O1	To obtain the theoretical knowledge on physiology and pathology of the pregnancy and the delivery as well as physiopathology of the neonatal period.
O2	To obtain practical ability of obstetrical examination of women during pregnancy, labor and puerperium.
O3	To obtain practical ability in management of normal and complicated delivery.
O4	To gain basic training in management of obstetrical emergencies.
O5	To gain basic knowledge about endocrinology.
O6	To gain practical basic skills in the field of obstetrics.

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:	
F.W9 p. 1	is able to diagnose menstrual cycle and its disorders;
F.W9 p. 2	reproductive functions of women, any related disorders and diagnostic and therapeutic actions concerning in particular: pregnancy. Graduate is able to diagnose and monitor physiological and pathological pregnancy.
F.W9 p. 3	Graduate is able to diagnose and monitor physiological and pathological childbirth; knows the puerperium development and complications during puerperium
Skills– Graduate* is able to:	
F.U15	Graduate is able to interpret CTG monitoring;
F.U16	recognize the beginning of delivery and improper delivery duration;
F.U13	recognize the signs and symptoms proving an improper course of pregnancy (abnormal bleedings, contractile activity of the uterus);
F.U14	interpret the results of a physical examination of a pregnant woman (blood pressure, heart function of the foetus's mother) and the results of laboratory tests proving pregnancy pathologies;
F.U17	Graduate is able to interpret the signs and symptoms during puerperium;
F.U18	Graduate knows indications and contraindications to use contraceptives.

** 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	Student respects medical confidentiality and patient's rights.
Skills– Graduate is able to:	
S1	Student is guided by the good of the patients, putting them in the foreground.
Social Competencies – Graduate is ready for:	
SC1	Able to establish and maintain a deep and respectful contact with the patient.
SC2	Able to establish and maintain a deep and respectful contact with the therapeutic team.

6. CLASSES		
Form of class	**Class contents**	**Effects of Learning**
Seminar (S)	S1. Diagnosis of the pregnancy. Physiological changes during pregnancy development. Methods of electronic (CTG,USG) and biochemical monitoring in pregnancy and labour. S2. Pregnancy in diabetic woman. Liver diseases in pregnancy. S3. Uterine function disorders: atony- diagnosis & treatment. Rupture of the uterus. Post-term pregnancy and induction of labour. S4. Haemostasis and coagulation disorders in pregnancy. Shock in obstetrics. Premature ablation of the placenta. Intrauterine fetal death. Amniotic fluid embolus. S5. Physiopathology of the newborn. S6. Abortion- classification, diagnosis and treatment. Incompetent cervix- diagnosis and treatment. Premature labour- treatment. The puerperium- normal changes and complications. S7. Rh incompatibility. Life threatening and emergency cases in obstetrics. S8. Heart diseases in pregnancy. Anaemia in pregnancy. Infectious diseases in pregnancy. Physiotherapy in obstetrics. S9. PIH and Eclampsia. Urinary tract infections in pregnancy. S10. Management of normal vaginal delivery. Breech presentation. Abnormal position and lie of fetus. Use of forceps and vacuum.	F.W9 p. 1, F.W9 p. 2, F.W9 p. 3, F.U15, F.U16, F.U13, F.U14, F.U17, F.U18, K1, S1, SC1, SC2
Classes (C)	Clinical practice in wards, practical classes with phantom demonstrations	F.U15, F.U16, F.U13, F.U14, F.U17, F.U18
e-learning (e-L)	Optional synchronous learning and asynchronous learning in online education via e-learning.wum.edu.pl, Microsoft Teams, Zoom (seminars only)	

7. LITERATURE
Obligatory
1. Llewelyn- Jones D.: "Fundamentals of Obstetrics and Gynaecology" Elsevier Limited, 2017.

Supplementary
1. Contemporary student's textbook of obstetrics and gynaecology edited in United States or the United Kingdom may be accepted. **2.** Crash Course 4th Edition, Obstetrics and Gynaecology. Elsevier Limited, 2019. **3.** Brian A. Magowan. Clinical Obstetrics and Gynaecology. 4th Edition. Elsevier Limited 2019. **4.** Kate V. Meriwether. Obstetrics and Gynaecology Morning Report. Elsevier 2018. **5.** Hao-Hua Wu. Gunner Googles. Augmented 1st Edition. Obstetrics and Gynaecology. Elsevier 2019. **6.** John Guillebaud. 7th Edition Contraception. Elsevier 2017.

8. VERIFYING THE EFFECT OF LEARNING

Code of the course effect of learning	Ways of verifying the effect of learning	Completion criterion
F.W9 p. 1, F.W9 p. 2, F.W9 p. 3, F.U15, F.U16, F.U13, F.U14, F.U17, F.U18, K1, S1, SC1, SC2	Complete the entire course and attendance at all classes with the exception of one permitted absence during the course. Student's presence confirmed in the student's card (S+PC) + positive result of the test	Normal Distribution (Gaussian Distribution)

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. The student is obliged to read the syllabus and time- table on the notice board in the department or provided via e-mail by the course coordinator.
2. Students participate in classes (seminars and practice) only with their groups. Possible group change is allowed in exceptional, justified situations and requires individual approval (anna.wnuk@wum.edu.pl; joanna.kacperczyk-bartnik@wum.edu.pl)
3. The student is obliged to follow the Medical University of Warsaw Regulations (available on the University website).
4. During classes with patients, students keep seriousness and silence, do not use their mobile phones.
5. Meals and drinks should be consumed during breaks.
6. Students are obliged to obey the rules regarding participation in the Operating Theatre activities (provided by course coordinator).
7. Students interested in additional learning opportunities in obstetrics and gynecology are welcome to the Students' Scientific Group affiliated to II Department of Obstetrics and Gynecology (contact: joanna.kacperczyk-bartnik@wum.edu.pl).
8. Based on recommendations from the external sanitary audit, students are not be allowed to wear nail polish during any type of classes held in the hospital. Therefore, we would like to kindly ask you to resign from wearing nail polish during our course.

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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	2026/2027
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 *(and address / addresses of unit / units)*	2nd Department of General, Vascular and Oncological Surgery Szpital Czerniakowski 19/25 Stępińska St., 00-739 Warsaw
Head of Educational Unit / Heads of Educational Units	Associate Professor Zoran Stojcev MD, PhD: stojcevz@gmail.com
Course coordinator *(title, First Name, Last Name, contact)*	Associate Professor Zoran Stojcev MD, PhD: stojcevz@gmail.com

Person responsible for syllabus *(First name, Last Name and contact for the person to whom any objections concerning syllabus should be reported)*	Małgorzata Polańska- Płachta MD, PhD: malgorzata.polanska-plachta@wum.edu.pl
Teachers	Mateusz Burdzel MD; mateusz.burdzel@wum.edu.pl Katarzyna Cybula MD; Magdalena Czach MD Magdalena Czerwińska MD; Mariusz Frączek MD PhD; mariusz.fraczek@wum.edu.pl Agnieszka Kwiatkowska MD; Inga Kowalczyk MD, Aneta Obcowska-Hamerska MD PhD; aneta.obcowska-hamerska@wum.edu.pl Agata Pomianowska MD; Małgorzata Polańska-Płachta MD PhD; malgorzata.polanska-plachta@wum.edu.pl Zoran Stojcev MD,PhD: stojcevz@gmail.com Mariusz Wyleżoł MD, PhD; mariusz.wylezol@wum.edu.pl Tomasz Sylwestrzak MD, Magdalena Czach MD, Adam Gryglas MD, Klaudia Piszczelska MD, Drzazowsk Dariusz MD

2. BASIC INFORMATION

Year and semester of studies	5th year, winter/spring semester	**Number of ECTS credits**	7.00

FORMS OF CLASSES **Contacting hours with academic teacher**	**Number of hours**	**ECTS credits calculation**
Lecture (L)	0	0
Seminar (S)	35	1,4
Classes (C)	65	2,6
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	75	3,0

3. COURSE OBJECTIVES

O1	Student takes medical history. Student assesses general condition of the patient, their consciousness and awareness. Student describes patient's somatic complaints. Student performs full medical examination. Student makes differential diagnosis.
O2	Student knows and understands signs and symptoms, diagnosis and management of the most common diseases that require surgical treatment
O3	Student knows indications, complications of the most common types of surgeries

O4	Student assists in typical surgery. Student is able to use basic surgical tools. Student obeys to rules of asepsis and antysepsis. Student knows safety rules of preoperative and postoperative patient's management.
O5	Student participates in basic medical procedures.

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:** *(in accordance with appendix to the Regulation of Minister of Science and Higher education from 26th of July 2019)*
Knowledge – Graduate* knows and understands:	
F.W1	Student knows and understands 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: a) Acute and chronic abdominal diseases b) Thoracic diseases c) limb and head diseases, head trauma d) bone fractures and organ injuries, politrauma
F.W3	Student knows indications, complications of the most common types of surgeries
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;
D.W4	social approaches to the meaning of health, illness, disability and aging, social consequences of illnesses, disability and socio-cultural barriers, as well as the applicable concept of life quality conditioned by health condition;
F.W10 p. 1-3	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 p. 3	causes, symptoms, principles of diagnosis and therapeutic treatment in the case of the most common diseases of the central nervous system in terms of: 3) cranial-cerebral injuries,
Skills– Graduate* is able to:	
D.U5	conduct an interview with an adult patient, a child and the family with empathy and listening actively; is able to discuss the patient's life situation;
D.U12	communicate with the team, sharing constructive feedback and support;
D.U15	observe patient's rights;

E.U1	collect medical history from adult patients;
E.U3	conduct a complete and targeted physical examination in adults;
E.U7	evaluate the general condition, the state of consciousness and awareness of a patient;
E.U16	plan diagnostic, therapeutic and preventive treatment;
E.U29 p. 2, 5, 7	perform the basic medical procedures , including: 2) vital signs monitoring with the aid of a pulse oximeter and cardiac monitor, 5) intravenous, intramuscular, subcutaneous injections, intravenous cannulation, venous blood sampling, blood culture taking, arterial and capillary blood sampling, 7) male and female urinary bladder catheterisation, nasogastric tube placement, stomach lavage, enema,
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.U5	place a venous access;
F.U6	examine nipples, lymph glands, thyroid gland and abdomen in the context of acute abdomen, as well as conduct the per rectum palpation;
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	-
Skills– Graduate is able to:	
S1	-
Social Competencies – Graduate is ready for:	
SC1	-

6. CLASSES		
Form of class	**Class contents**	**Effects of Learning**
Classes (C)	C1- Physical examination and medical history taking. C2- Medical case presentation. C3- Participation in the medical procedures undertaken on the ward, postoperative room. C4- Participation in surgeries. C5- Outpatient Department.	F.W1, F.W3, F.W4, F.W5, D.W4, F.W10 p. 1-3, F.W13 p. 3; D.U5, D.U12, D.U15, E.U1, E.U3, E.U7, E.U16, E.U29 p. 2, 5, 7, F.U1,

	C6- Basic suturing techniques. C7- Ultrasound imaging as a diagnostic and therapeutic tool.	F.U2, F.U3, F.U5, F.U6, F.U12, F.U21, F.U22
Seminar (S)	S1- Preoperative and postoperative problems in surgical patient care. S2- Surgical wounds care and surgical technique. S3- Abdominal hernias S4- Head trauma S5- Gastrointestinal bleeding. S6- Acute pancreatitis. S7- Gallstones and chronic cholecystitis. S8- Colon cancer. S9- DVT S10- Spleen surgery S11- Ileus S12- Peptic ulcer disease S13- Appendicitis S14- Introduction to trauma S15- Atherosclerosis obliterans. Aneurysms.	F.W1, F.W3, F.W4, F.W5, D.W4, F.W10 p. 1-3, F.W13 p. 3 D.U5, D.U12, D.U15, E.U1, E.U3, E.U7, E.U16, E.U29 p. 2, 5, 7, F.U1, F.U2, F.U3, F.U5, F.U6, F.U12, F.U21, F.U22

7. Literature

Obligatory

Priciples and Practice of Surgery. O. James Garden et al. Elsevier, 7th Edition

Supplementary

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8. Verifying the effect of learning

Code of the course effect of learning	Ways of verifying the effect of learning	Completion criterion
F.W1, F.W3, F.W4, F.W5, D.W4, F.W10 p. 1-3, F.W13 p. 3 D.U5, D.U12, D.U15, E.U1, E.U3, E.U7, E.U16, E.U29 p. 2, 5, 7, F.U1, F.U2, F.U3, F.U5, F.U6, F.U12, F.U21, F.U22	Students are assessed on the grounds of their regular attendance at seminars and active participation in bedside classes	Attendence
	MCQ test	At least satisfactory result of the MCQ test provided on the last day of the course (12/20).

9. Additional information

Didactics and organization of the classes:

- realization of the program will be based on seminars presenting the current state of knowledge in specific subject and practical classes in clinical wards, out-patients clinics, operation theater

- classes start at 9 a.m and continue until 2 p.m. (including half- an- hour- break)

- students are expected to have their own lab coat, stethoscope, student's ID, shoes

- to complete the course students are expected to pass a test composing of 20 questions (a minimum of 12 correct answers is needed to pass the test). MCQ test covers program based on seminars and practical classes

- student's absences should be worked out on duties in terms coordinated by tutor; only 2 absences are allowed to be worked out. There is no credit for the student who was missing more practical classes or seminars

Justified Absences from Classes, Assessments, Examinations, and Internships
To justify an absence from classes, assessments, examinations, or internships, a student is required to notify the course coordinator or another person designated by the head of the unit by email or in writing no later than three working days after the date on which the class, assessment, examination, or internship took place.
Submission of a justification after this deadline is permitted if the student was unable to provide it for valid reasons. In such cases, the document should be submitted as soon as the reason for the absence no longer exists.

Course Completion (Assessment)
In the case of a justified absence from an assessment, the student has the right to complete the assessment at the next date scheduled by the academic unit.
An unjustified absence constitutes grounds for recording a failure to complete the course requirement on that date.
If a student fails to complete the course requirement by the final designated assessment date in a given academic year, the student does not receive credit for the course.
If a student receives a failing grade in a course that concludes with an assessment rather than an examination, the student is entitled to two resit assessment attempts.

Surgery Club

Surgery Club is directed to English Division students. Tutors of the club are M. Polańska- Płachta MD PhD, Meetings are held twice a month. Members of the club are allowed to participate in medical duties and have the possibility to write medical papers, case reports which are then presented on student's conferences.

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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.

Rehabilitation

1. IMPRINT	
Academic Year	2026/2027
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 Rehabilitation University Clinical Center of the Medical University of Warsaw Banacha 1a Street, 02-097 Warsaw Phone: +48 22 599 25 63 https://uckwum.pl/spcsk/zaklad-rehabilitacji/
Head of Educational Unit / Heads of Educational Units	Prof. dr hab. n. med. Witold Rongies
Course coordinator	Karen Shahnazaryan, PhD E-mail: karen.shahnazaryan@wum.edu.pl
Person responsible for syllabus	Agnieszka Lewińska, PhD E-mail: agnieszka.lewinska@awf.edu.pl
Teachers	Aleksandra Bogusz, MSc; Adam Boniszewski, MSc; Ewa Kobiela, MSc; Agnieszka Lewińska, PhD; Dariusz Piszczyk, MSc; Karen Shahnazaryan, PhD; Norbert Zylbert, MSc;

2. BASIC INFORMATION			
Year and semester of studies	V year, IX & X semester	**Number of ECTS credits**	1.00

FORMS OF CLASSES **Contacting hours with academic teacher**	**Number of hours**	**ECTS credits calculation**
Lecture (L)		
Seminar (S)	10	0.4
Classes (C)	20	0.6
e-learning (e-L)		
Practical classes (PC)		
Work placement (WP)		
Unassisted student's work		
Preparation for classes and completions	15	0

3. COURSE OBJECTIVES	
O1	Introduction to the basics of medical rehabilitation
O2	Recognize various physical disabilities and functional limitations experienced by people who receive rehabilitation services
O3	Identify generic and specialized resources available to serve people with disabilities
O4	Identify the roles of different professionals in the field of rehabilitation
O5	Develop basic rehabilitation service delivery skills - Describe rehabilitation process and techniques used to evaluate eligibility for services - Develop appropriate treatment plans, and provide follow-up

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:** *(in accordance with appendix to the Regulation of Minister of Science and Higher education from 26th of July 2019)*
Knowledge – Graduate* knows and understands:	
A.W2	structure of the human body in the topographical approach (upper and lower limb, chest, abdomen, pelvis, back, neck, head) and the functional approach (skeletal system, muscular system, urinary system, reproductive system, nervous system and sensory system, integumentary system);

A.W3	topographic relations between particular organs;
B.W9	physical bases of the chosen therapeutic techniques including ultrasounds and irradiations;
D.W18	rules of teamwork;
E.W7 p. 7	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,
E.W30.	The concept of disability and invalidity
E.W31.	The role of medical rehabilitation and methods used within the course of medical rehabilitation process
F.W13 p. 6	causes, symptoms, principles of diagnosis and therapeutic treatment in the case of the most common diseases of the central nervous system in terms of: 6) diseases of the spine and spinal cord;
Skills– Graduate* is able to:	
A.U3	explain the anatomical background of the physical examination;
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);
B.U7	perform simple diagnostic tests which are able to assess human body as a constant regulatory system (stress and exercise test, etc.); interpret numerical data concerning the basic physiological variables;
D.U12	communicate with the team, sharing constructive feedback and support;
E.U18	propose the individualisation of applicable therapeutic guidelines and alternative treatment in the case of ineffectiveness or contraindications to standard therapy;
E.U22.	Perform a functional assessment of a patient with disability
E.U23.	Propose rehabilitation program in the most common diseases
E.U35	assess pressure ulcers and apply proper dressings;

** 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	Diagnostic and therapeutic methods appropriate for specific disease states E.W14
Skills– Graduate is able to:	
S1	Communicate with colleagues in the team and share knowledge
Social Competencies – Graduate is ready for:	

SC1	Noticing and recognizing own limitations and self-assessment of deficits and educational needs
SC2	The use of objective sources of information
S.C3	Implementing the principles of professional camaraderie and cooperation in a team of specialists, including representatives of other medical professions, also in a multicultural and multi-national environment

6. Classes

Form of class	Class contents	Effects of Learning
Seminar	The principles of medical rehabilitation Rehabilitation programs' organization Physiotherapeutic methods used in medical rehabilitation	A.W2, A.W3, B.W9, D.W18, E.W7 p. 7, E.W30, E.W31, F.W13 p. 6 A.U3, A.U4, B.U7, D.U12, E.U18, E.U22, E.U23, E.U35, K1, S1, SC1, SC2
Classes	Physiotherapy in an outpatient - kinesiotherapy - physical therapy - massage Physiotherapy in a hospital ward - surgical department - internal medicine department - intensive care unit Functional assessment of a patient Orthopedic equipment Ergonomics	A.W2, A.W3, B.W9, D.W18, E.W7 p. 7, E.W30, E.W31, F.W13 p. 6 A.U3, A.U4, B.U7, D.U12, E.U18, E.U22, E.U23, E.U35, K1, S1, SC1, SC2

7. Literature

Obligatory

Mitra R. Principles of Rehabilitation Medicine [Internet]. New York: McGraw-Hill Education; 2019. Available in: https://accessmedicine-1mhmedical-1com-1000015tb0cd3.han3.wum.edu.pl/Book.aspx?bookid=2550

Maitin I. B., Cruz E. Current diagnosis & treatment. Physical medicine & rehabilitation [Internet]. New York: McGraw-Hill Education; 2015. Available in: https://accessmedicine-1mhmedical-1com-1000015tb0cd3.han3.wum.edu.pl/Book.aspx?bookid=1180

Supplementary

Students who are particularly interested in the issues discussed, will have access to the additional materials. Articles and books will be available on the e-learning platform: https://e-learning.wum.edu.pl/en/ .

8. Verifying the effect of learning

Code of the course effect of learning	Ways of verifying the effect of learning	Completion criterion
A.W2, A.W3, B.W9, D.W18, E.W7 p. 7, E.W30, E.W31, F.W13 p. 6	Test with Multiple Choice Questions (MCQs)	Meeting the minimum attendance requirement documented on the attendance sheet.

A.U3, A.U4, B.U7, D.U12, E.U18, E.U22, E.U23, E.U35, K1, S1, SC1, SC2		Correct answers to at least 60% of MCQs.
	Direct teacher's assessment	Meeting the minimum attendance requirement documented on the attendance sheet. Active participation in class discussions and activities. Completing assignments and projects. Practical demonstrations that show application of learned concepts.

9. Additional information

Course Duration: 1 week (Monday to Friday)
Attendance: Attendance is mandatory. The attendance list will be checked daily. More than one absence will result in failing the course. Only documented reasons for absence will be considered.
Dress Code: Lab coats/scrubs and appropriate footwear are required.

Meeting point: Department of Rehabilitation (Banacha 1a Str., Building E, -1 floor, next to registration) at 9:00 a.m.
Schedule: A detailed course schedule will be provided on the first day.

Materials: Self-study materials will be available on the WUM e-learning platform: https://e-learning.wum.edu.pl/en/.
Final Test: The final test will take place on the last day of the course.

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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.

Transplantology

1. IMPRINT	
Academic Year	2026/2027
Department	Faculty of Medicine
Field of study	Medicine
Main scientific discipline	Medical sciences
Study ProfileGeneral academic	General academic
Level of studies	Uniform MSc
Form of studies	Full time studies
Type of module / courseObligatory	Obligatory
Form of verification of learning outcomes	Completion
Educational Unit / Educational	Department of Transplantology, Immunology, Nephrology and Internal Medicine (1W22) Address: 59 Nowogrodzka St, 02-006 Warsaw e-mai: kl.trans.img.nef.skdj@uckwum.pl Phone: 22 502 12 32 Fax: 22 502 21 26
Head of Educational Unit / Heads of Educational Units	Professor Krzysztof Mucha, MD PhD
Course coordinator	Agnieszka Furmańczyk-Zawiska MD PhD e-mail: agnieszka.furmanczyk-zawiska@wum.edu.pl; phone: 022 502 12 23
Person responsible for syllabus	MD PhD Agnieszka Furmańczyk-Zawiska
Teachers	Teresa Bączkowska, MD, PhD Dominika Dęborska-Materkowska, MD, PhD Magdalena Durlik professor Agnieszka Furmańczyk-Zawiska, MD, PhD Jolanta Gozdowska, MD, PhD Maciej Kosieradzki professor Krzysztof Mucha, professor Joanna Pazik, MD, PhD Beata Łągiewska, MD, PhD Łukasz Górski, MD PhD

	Ewa Nowacka-Cieciura, MD, PhD Marek Pacholczyk, MD, PhD Marta Serwańska-Świętek MD PhD

2. BASIC INFORMATION

Year and semester of studies	V year, IX and X semester	**Number of ECTS credits**	2.00

FORMS OF CLASSES **Contacting hours with academic teacher**	**Number of hours**	**ECTS credits calculation**
Lecture (L)	6	0.24
Seminar (S)	19	0.76
Classes (C)	15	0.60
e-learning (e-L)		
Practical classes (PC)		
Work placement (WP)		
Unassisted student's work		
Preparation for classes and completions	10	0.40

3. COURSE OBJECTIVES

O1	Legal issues in transplantology. Indications for solid organ transplantation
O2	Basics of transplantation immunology, tissue typing and recipient selection, rules of immunosuppressive treatment.
O3	Common post-transplant complications- pathogenesis, clinical presentation, differential and treatment

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:** *(in accordance with appendix to the Regulation of Minister of Science and Higher education from 26th of July 2019)*
Knowledge – Graduate* knows and understands:	
C.W25	transplantation immunology, principles of selecting the donor and recipient of organ and stem cells transplants
C.W39	most important side effects of medicines, including those resulting from their interaction;
E.W7 p. 1,3,4,5	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, 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,
F.W14	The basics of interventional transplantation, indications for the transplantation of irreversibly damaged organs and tissues and related procedures
F.W15	principles of suspecting and recognising the brain death
G.W9	legal regulations concerning transplantations, artificial reproduction, abortion, aesthetic procedures, palliative treatment and mental diseases;
Skills– Graduate* is able to:	
D.U4	develop a trust-based relationship during the whole diagnostic and treatment process;
D.U15	observe patient's rights;
E.U1	collect medical history from adult patients;
E.U3	conduct a complete and targeted physical examination in adults;
E.U7	evaluate the general condition, the state of consciousness and awareness of a patient;
E.U12	perform the differential diagnosis of the most common diseases in adults and children;
E.U14	recognise immediate threats to life;
E.U16	plan diagnostic, therapeutic and preventive treatment;
E.U17	analyse the side effects of particular medicines and interactions between them;
E.U20	qualify patients for home and hospital treatment;
E.U24	interpret laboratory test results with the identification of reasons for deviation;
E.U32	plan specialist consultations;
E.U38	keep a patient's medical records
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.U12	monitor perioperative care with the aid of basic vital signs;

** 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 effects of learning	**Effects in the fields of:**
Knowledge – Graduate knows and understands:	
K1	D.W6 The importance of verbal and non-verbal communication in the process of communicating with the patient and the concept of trust in the interaction with the patient
K2	Types of transplants and immune mechanisms of allograft rejection
Skills– Graduate is able to:	
S1	E.U29 p. 1 Perform basic medical procedures including: body temperature measurement (superficial and deep), pulse measurement, non-invasive pressure measurement
Social Competencies – Graduate is ready for:	
SC1	Acts for the patient's sake as his priority
SC2	Able to establish and maintain a deep and respectful contact with the patient.

6. CLASSES		
Form of class	**Class contents**	**Effects of Learning**
Lectures	L1. Organization of organ procurement and sharing in Poland. L2 Surgical complications in transplant recipients L3. Transplantation of heart, transplantation of lungs. L4. Regenerative medicine. L5. Transplant tolerance. L6. Current problems of transplantology.	F.W15, G.W9. F.W14 F.W14 C.W25 F.W15, G.W9, C.W25
Seminars	S1. Donation, multi-organ procurement and organ storage S2. Qualification to kidney transplantation. S3. Qualification to liver transplantation. S4-5. Liver transplantation- surgical techniques and surgical complications. S6-7 Cardiovascular, metabolic and hematological complications after solid organ transplantation. S8. Post-transplant malignancies. S9-10. Principles of immunosuppressive therapy in organ transplantation. S11-12. Transplant rejection and other types of transplant pathologies. S13. Living donation in kidney transplantation. S14-15 Infectious complications after solid organ transplantation. S16. Transplantation of pancreas and pancreatic islets. S17. Challenges, equity, ethical dilemmas in clinical decision-making – a case-based approach S18-19. Post-transplant management of kidney allograft recipients.	.W15, G.W9. E.W7. E.W7. F.W14 E.W7 E.W7 C.W39 C.W25 F.W14, G.W9 E.W7 E.W7 E.W7
Clinical classes	C1-12 – clinical rounds, individual cases analysis in the department	E.U1, E.U3, E.U7, E.U14,

	C13 – passive participation in the allograft biopsy C14-15 – passive/active participation in out-patient consultations	E.U16, E.U17, E.U32, E.U20, E.U38, D.U15

7. Literature

Obligatory

Handbook of kidney transplantation by Gabriel M. Danovitch, Wolters Kluwer Healths 2026

Supplementary

Medical journals:
1. Transplantation
2. Nephrology Dialysis and Transplantation

8. Verifying the effect of learning

Code of the course effect of learning	Ways of verifying the effect of learning	Completion criterion
E.U1, E.U3, E.U7 E.U12, E.U14 E.U16, E.U17 E.U20 B.W21, B.W24, EW1, E.W7, D.U15, C.U17, E.U17	Continuous assessment during the classes, presence and active participation in the clinical rounds and bedside classes. Each absence from class must be made up with another group or during an extra appointment MCQ test (fifteen questions) Retake test is taken with another group	9 points – 2.0 (failed) 10 points – 3.0 (satisfactory) 11 points – 3.5 (rather good) 12 points – 4.0 (good) 13 points – 4.5 (more than good) 14-15 points – 5.0 (very good)

9. Additional information

1. The classes are held at The Dept of Transplantology Immunology Nephrology and Internal Medicine (SKDJ, Lindleya Str), building 1A
2. Duration of the course is 1 week (from Monday to Friday).
3. Completion of the course is be based on seminars including current state of knowledge in specific subject and bedside classes in clinical wards and out-patient clinics
4. Classes start at 8.30 am.
5. During the course no absences will be excused. Students are obliged to make up for each absence with another group or during an extra appointment.
6. Students are expected to have their own scrubs uniforms, stethoscope, student's ID, footwear.
7. The students participate in classes (seminars and practice) only with the group. Possible group change is allowed in exceptional, justified situations and requires individual approval.
   All student affairs are provided on an ongoing basis on the Clinic's website

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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.

Palliative Medicine

1. IMPRINT	
Academic Year	2026/2027
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	Department of Palliative Medicine (1M10), 4 Lindleya St., 02-005 Warsaw; phone: 48 22 502 20 56, e-mail: kmp@wum.edu.pl
Head of Educational Unit / Heads of Educational Units	Assoc. prof. Tomasz Dzierżanowski, MD, PhD, MBA
Course coordinator	Assoc. prof. Tomasz Dzierżanowski, MD, PhD, MBA (tomasz.dzierzanowski@wum.edu.pl; for all inquiries regarding the course, please contact the Department's Office – Ms. Oliwia Pogorzelska kmp@wum.edu.pl tel. 22 502 20 56
Person responsible for syllabus	Assoc. prof. Tomasz Dzierżanowski, MD, PhD, MBA (tomasz.dzierzanowski@wum.edu.pl; for all inquiries regarding the course, please contact the Department's Office – Ms. Oliwia Pogorzelska kmp@wum.edu.pl tel. 22 502 20 56
Teachers	Assoc. prof. Tomasz Dzierżanowski, MD, PhD, MBA Agnieszka Stasieńko MD Piotr Dudek MD

2. BASIC INFORMATION			
Year and semester of studies	Year 5, Semesters IX and X (winter and summer)	**Number of ECTS credits**	1.00

FORMS OF CLASSES **Contacting hours with academic teacher**	**Number of hours**	**ECTS credits calculation**
Lecture (L)	0	0
Seminar (S)	20	0.8
Classes (C)	0	0
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	5	0.2

3. COURSE OBJECTIVES	
O1	Present the definition, goals, philosophy, and principles of palliative medicine, including its ethical aspects.
O2	Provide students with the knowledge and skills necessary for the diagnosis, prevention, and management of pain and other common symptoms in patients with advanced incurable diseases
O3	Develop appropriate attitudes towards dying patients, effective communication skills with patients and their caregivers, and competencies required to provide empathetic, holistic care for patients and their families

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:** *(in accordance with appendix to the Regulation of Minister of Science and Higher education from 26th of July 2019)*
Knowledge – Graduate* knows and understands:	
E.W29	principles of pain management, including in cancer and chronic pain
E.W27	principles of diagnosis and therapeutic treatment in the most common problems of palliative medicine, including: a) symptomatic treatment of the most common somatic symptom b) proceedings in tumour cachexia and in the prevention and treatment of pressure ulcers the most frequent emergencies in palliative medicine
E.W28	rules of palliative treatment of a patient in the terminal state

Skills– Graduate* is able to:	
E.U20	qualify patients for home and hospital treatment
E.U21	recognise the conditions in which life expectancy, functional patient state or preferences limit the treatment according to the guidelines for a given disease

** 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	Place the patient's best interests as the primary consideration in all professional activities
SC2	Respect medical confidentiality and uphold patients' rights
SC3	Recognize their own professional limitations and the need for continuous professional development (CPD) and lifelong learning

6. Classes

Form of class	Class contents	Effects of Learning
Seminar S1 (2 h)	Definitions, historical background, principles and models of palliative medicine; eligibility criteria and referral to palliative care.	E.W29, E.W27, E.W28, E.U20, E.U21; SC1, SC2, SC3
Seminar S2 (2 h)	Principles and practical skills in the assessment and management of pain in cancer and other chronic diseases, based on the WHO, ESMO and EAPC clinical guidelines.	E.W29, E.W27, E.W28, E.U21; SC1, SC2, SC3
Seminar S3 (1 h)	Principles of comprehensive symptom management in patients with advanced cancer through clinical case discussions, focusing on selected somatic and psychological symptoms.	E.W29, E.W27, E.W28, E.U20, E.U21; SC1, SC2, SC3
Seminar S4 (3 h)	Stages of psychological adaptation to incurable, life-limiting illness; practical communication skills for interacting with dying patients and their families throughout the different stages of adaptation.	E.W27; SC1, SC2, SC3
Seminar S5 (2 h)	Palliative care in non-malignant diseases.	E.W29, E.W27, E.W28, E.U21; SC1, SC2, SC3
Seminar S6 (1 h)	Ethical issues at the end of life (futile and inappropriate treatment, euthanasia, conditions for a dignified death); the physician's professional attitude; **Edmund D. Pellegrino's virtue ethics**.	E.W27; SC1, SC2, SC3
Seminar S7 (1 h)	The multidimensional nature of suffering.	E.W27; SC1, SC2

Practical Class 1 (4 h)	Assessment and holistic evaluation of the needs of patients with advanced incurable disease.	E.W29, E.W27, E.W28, E.U21; SC1, SC2, SC3
Practical Class 2 (4 h)	Practical skills in pressure injury prevention and wound management; planning and organization of palliative care; the interdisciplinary team.	E.W29, E.W27, E.W28, E.U21; SC1, SC2, SC3
Self-Directed Learning	E1 (2 h) Assessment and management of respiratory symptoms in palliative care; E2 (2 h) Assessment and management of gastrointestinal symptoms in palliative care; E3 (2 h) A holistic approach to patients with advanced cancer; the concept of total pain (based on the reading: *Tomasz Dzierżanowski. Brzegi dobrej Rzeki*. Multico, Warsaw, 2016, Chapters 2 and 10, or another educational resource/live patient session); E4 (1 h) Assessment and management of pressure injuries in palliative care; E5 (2 h) Emergencies in palliative care.	E.W29, E.W27, E.W28, E.U21; SC3

7. Literature

Obligatory

Supplementary

Elisabeth Kübler Ross "On Death and dying" Scribner, New York City, 2011
Viktor Emil Frankl "Man's Search for Meaning" Rider Books, London, 2004

8. Verifying the effect of learning

Code of the course effect of learning	Ways of verifying the effect of learning	Completion criterion
E.W29, E.W27, E.W28 SC1, SC2, SC3	Solving selected clinical cases.	Active participation during classes.
E.W29, E.W27, E.W28, E.U20. E.U21, SC1, SC2, SC3	Observation of participants' activity during seminars and practical classes, with particular emphasis on work within task-oriented subgroups.	Satisfactory development of practical skills and appropriate application of social competencies — assessed by the teaching assistant.

9. Additional information

The course consists of 18 hours of contact seminars and 12 hours of self-directed learning.
Before attending the seminars, students should review their knowledge of opioid analgesic pharmacology and familiarize themselves with the introduction to the practical part of the course.

To pass the course, students are required to actively participate in all seminars and practical classes.
In the case of an excused absence, the student should attend the missed seminar with another group, upon the approvement.

Contact seminars (18 hours) are held at 8 hours (Monday–Tuesday) – seminar room of the Department of Palliative Medicine of the University Clinical Centre of the Medical University of Warsaw, Lindleya 4, 02-005 Warsaw, level -1; entrance from the church side.

Contact:
Ms. Oliwia Pogorzelska,
Secretariat of the Department of Palliative Medicine,
Lindleya 4, 02-005 Warsaw, Building 20D (main building), ground floor;
tel. +48 22 502 20 56;
kmp@wum.edu.pl

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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.

Neonatology

1. IMPRINT	
Academic Year	2026/2027
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 Neonatology and Neonatal Intensive Care Medical Univerity of Warsaw 1W63 00-315 Warsaw, St Karowa 2 Tel 22 59558155 e-mail neonatologia@poczta.szpitalkarowa.pl
Head of Educational Unit / Heads of Educational Units	Professor Renata Bokiniec MD PhD
Course coordinator	Joanna Puskarz- Gąsowska MD PhD Tel 225966155/ 225966136 jpuskarz@wum.edu.pl
Person responsible for syllabus	Joanna Puskarz- Gąsowska MD PhD

Teachers	Joanna Puskarz-Gąsowska MD PhD, Joanna Seliga – Siwecka MD, PhD, Alicja Kołodziejczyk- Nowotarska MD PhD, Joanna Ulan MD, Marzanna Reśko- Zachara MD PhD Edyta Bielska MD Kamila Sośnicka MD Dominika Paw MD

2. BASIC INFORMATION			
BASIC INFORMATION	5th year, winter/suumer semester	Number of ECTS credits	1

Year and semester of studies FORMS OF CLASSES	Number of hours	ECTS credits calculation
Contacting hours with academic teacher		
Lecture (L)		
Seminar (S)	5	0,2
Classes (C)	10	0,4
e-learning (e-L)		
Practical classes (PC)		
Work placement (WP)		
Unassisted student's work		
Preparation for classes and completions	10	0,4

3. COURS OBJECTIVES	
C1	Acquiring skills in examining a newborn and getting acquainted with issues in the field of physiology and pathology of the neonatal period.
C2	Principles of neonatal life suport and postpartum resuscitation of the newborn
C3	Know the basic complications of prematurity

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 the effect o 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:	
E.W1.	environmental and epidemiological conditions of the most common ilness
E.W2.	rules of nutrition of healthy and sick children, protective vaccinations and routine children's health checks
E.W3.	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.W5.	basic methods of diagnosing and treating the foetus
E.W6.	the most common life threatening conditions in children and the management of these conditions
F.W6.	indications for and principles of use of intensive care
F.W7.	applicable recommendations concerning resuscitation of newborns, children and adults
F.W10.	the issues of contemporary imaging studies in neonatology
G.W9.	legal regulations concerning transplantations, artificial reproduction, abortion, aesthetic procedures, palliative treatment and mental diseases;
Skills– Graduate* is able to:	
E.U2.	collect medical history from a child and its family;
E.U4.	conduct a physical examination of children of any age
E.U8.	assess the condition of newborns in the APGAR scale and assess their maturity, examine the newborn reflexes
E.U14.	recognize the states of immediate threat to the life of the newborn
E.U12.	perform the differential diagnosis of the most common diseases in adults and children
E.U14.	recognise immediate threats to life
E.U16.	plan diagnostic, therapeutic and preventive treatment
E.U20.	qualify patients for home and hospital treatment
E.U24	interpret laboratory test results with the identification of reasons for deviation
E.U27.	qualify the patient for vaccinations in the neonatal period

F.U11.	follow the algorithm of advanced life support;

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:**
Social Competencies – Graduate is ready for:	
SC1	establishing and maintaining deep and respectful contact with the patient and the child's mother, as well as showing understanding for worldview and cultural differences
SC2	be guided by the good of the patient;
SC3	observance of medical confidentiality and patient rights;
SC4	taking actions towards the patient based on ethical principles, with the awareness of social conditions and limitations resulting from the disease;
SC5	noticing and recognizing own limitations and self-assessment of deficits and educational needs
SC6	implementing the principles of professional camaraderie and cooperation in a team of specialists, including representatives of other medical professions, also in a multicultural and multinational environment
SC7	formulating conclusions from own measurements or observations;
SC8	accepting responsibility for decisions made in the course of professional activity, including in terms of one's own safety and that of others.

6. CLASSES		
Class contents	Class contents	Class contents
Seminars	Adaptation to extrauterin life Principles of examining a newborn. Complications of prematurity. Neonatal Jaundice. Infections of the neonatal period. Perinatal hypoxia. Newborn life suport after birth.	E.W1. E.W2. E.W3. E.W5. E.W6. F.W6. F.W7. F.W10. G.W9.
Classes	Practical classes at Neonatal Intensive Care, Special Care Unit, Maternity Unit, Delivery room Resuscitation classes in Medical Simulation Center.	E.U2. E.U4. E.U8. E.U14. E.U12. E.U24. E.U16. E.U20. E.U27. F.U11.

7. LITERATURE
Obligatory
Neonatology, 8th Edition, Tricia Lacy Gomella
Suplementary:
Care of the high-risk neonate- Klaus and Fanaroff's

8. VERIFYING THE EFFECT OF LEARNING

Code of the course effect of learning	Code of the course effect of learning	Code of the course effect of learning
E.W1. E.W2. E.W3. E.W5. E.W6. F.W6. F.W7. F.W10. G.W9.	Seminars	*Written test*
E.U2. E.U4. E.U8. E.U14. E.U12. E.U24. E.U16. E.U20. E.U27. F.U11.	Classes	Disease history, epicrisis, observations, recommendations, oral exercise report
Social Competencies:	S, PC	Oral excercise raport an observations

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)*

. During the classes the following are necessary: medical scrubs, change of shoes, stethoscope
2. The class lasts 4 days, classes begin up at 8:15. University Hospital Karowa 2 Street including 1 day at the Medical Simulation Center, 8:30 a.m.
The scope of knowledge applicable at the final test is included in the topics of classes during seminars and exercises, and /ore materials on the e-learning platform. Completion of the course is in writing test. Completing the block requires active participation in all bedside activities and seminars (including preparation for seminars) and passing a test- 20 questions, 14 positive guarantees passing test
The condition for admission to the colloquium is a positive evaluation of the clinical classes and the completion of possible absences. Unauthorized absence from the test results in failure to pass the course. Obtaining a fail mark in the test requires correction in the same form (written test) with the next groups within the free group lesson.
4 Student attendance at all classes is mandatory; a maximum of 1 day (in exceptional cases 2 days per semester) of excused absence is permitted. Absences from seminars are counted as an oral response on the missed topic (by the date of the test) – recorded seminars are available on the e-learning platform. Absences from bedside classes are made up in the form of additional clinical duty between 3:30 p.m. and 7:30 p.m. on a date set by the assistant - available dates twice per semester - not individually for each student. Only excused absences are taken into account; unexcused absences result in failure of the block. Unusual, random cases are decided on an individual basis.
5. Please do not be late for classes. A delay of more than 15 minutes is considered an absence.
6. Students interested in neonatology can participate in the activities of the Students' Science Club in the Clinic. https://web.facebook.com/sknnoworodki;

7. On the last day of classes, after the test, students complete an anonymous internal questionnaire summarizing the block of neonatology classes.
8. All student information is provided on an ongoing basis on the Clinic's website
www.klinikaneonatologii.wum.edu.pl

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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.

Public Health

1. IMPRINT	
Academic Year	2026/2027
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	Department of Social Medicine and Public Health ul. Pawińskiego 3a, 02-106 Warszawa e-mail: msizp@wum.edu.pl
Head of Educational Unit / Heads of Educational Units	Prof. dr hab. n. med. Aneta Nitsch-Osuch
Course coordinator	Prof. dr hab. n. med. Aneta Nitsch-Osuch; anitsch@wum.edu.pl

Person responsible for syllabus	Dr hab. Magdalena Łoś; mbogdan@wum.edu.pl
Teachers	Dr hab. Magdalena Łoś Dr Anna Jagielska Dr Aleksandra Kozłowska

2. BASIC INFORMATION

Year and semester of studies	5th year, winter and spring semester	**Number of ECTS credits**	1.00

FORMS OF CLASSES **Contacting hours with academic teacher**	**Number of hours**	**ECTS credits calculation**
Lecture (L)	-	-
Seminar (S)	20	0.8
Seminar (S)	5 (5 in the form of e-learning)	0.2
Unassisted student's work		
Preparation for classes and completions	5	

3. COURSE OBJECTIVES

O1	To gain the knowledge from public health field.

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:** *(in accordance with appendix to the Regulation of Minister of Science and Higher education from 26th of July 2019)*
Knowledge – Graduate* knows and understands:	
D.W1	social dimension of health and disease, influence of society (family, social relationships network) and social inequalities on health condition, as well social and cultural differences and the roles of social stress in health and self-destructive behaviours
D.W8	how healthcare institutions operate and the social role of physicians

D.W14.	rules of promotion of health, its objectives and main directions of operation, with a special focus on the awareness of healthy lifestyle
D.W17	rights of patients
G.W1	health assessment methods of an individual and a population, disease and medical procedure classification
G.W4	term of public health, its purposes, objectives, as well as the structure and organisation of the healthcare system at the national and global levels, as well as the influence of economic conditions on healthcare availability
G.W5	legal regulations relating to granting healthcare benefits, patient rights, the basics of the profession of a physician and functioning of the medical self-government
G.W6	basic regulations concerning the organisation and financing of the healthcare system, the general health insurance and the rules of organisation of healthcare entity enterprises
Skills– Graduate* is able to:	
B.U10	use databases, including the Internet and search for needed information with available tools
D.U3	choose a treatment causing minimum social consequences to a sick person
D.U9	advise on the observance of therapeutic guidelines and healthy lifestyle
D.U15	observe patient's rights
E.U38	keep a patient's medical records
G.U1	describe the demographic structure of a population and assess the population's health problems on this
G.U2	collect information about the presence of the factors of risk of infectious and chronic diseases and plan preventive actions at various levels of prevention
G.U3	interpret the incidence of diseases and disability
G.U4	assess the epidemic situation of diseases common in the Republic of Poland and worldwide
G.U5	explain to healthcare users their basic entitlements and the legal basics of granting bonuses
G.U6	draw up medical certificates for patients, their families and other entities

** 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:	
W1	ethical, social and legal conditions for practicing medicine and the principles of health promotion, bases knowledge on the scientific evidence
W2	methods of conducting scientific research
Skills– Graduate is able to:	

U1	can plan his/her own educational activity and constantly improve his/her knowledge in order to update the knowledge
Social Competencies – Graduate is ready for:	
K1	establishing and maintaining deep and respectful contact with the patient, as well as showing understanding for differences in worldviews and cultures
K2	compliance with medical confidentiality and patient's rights
K3	promoting pro-health behaviors
K4	using objective sources of information
K5	Implementing the principles of professional team cooperation, including representatives of other medical professions, also in multicultural and multinational environment

6. Classes

Form of class	Class contents	Effects of Learning
Seminars (s-l)	S1 (e-l) – Essentials of Public Health. S2 (e-l) – Basics of medical law and patient's rights. S3 (e-l) – International healthcare systems profiles. S4 (e-l) – Basics of organization and healthcare management. S5 (e-l) – E-health and telemedicine.	D.W1; D.W8; D.W14; D.W17; G.W1; G.W4; G.W5; G.W6; B.U10; D.U3; D.U9; D.U15; E.U38; G.U1; G.U2; G.U3; G.U4; G.U5
Seminars	S1 – Introduction to Public Health: - Basics definitions and concepts; - Health promotion and disease prevention; - The place of public health and heath education in the healthcare system. S2 – Basics of medical certification, medial law and patient's rights. S3 - Healthcare systems – in Poland and in the world, including: - The healthcare system assessment approach; - Models of the financing and organization of healthcare systems; - The impact of health of the economy. S4 – Essentials of healthcare interventions, including: - Basics of health policy; - Organizational and management aspects.	D.W1; D.W8; D.W14; G.W1; G.W4; G.W5; G.W6; B.U10; D.U3; D.U9; E.U38; G.U1; G.U3; G.U4; G.U5; K1; K2; K3; K4; K5; U1; W1; W2

7. Literature

Obligatory

1. Detels R., et al., Oxford Textbook of Global Public Health (7 edn), Oxford Medicie Online, 2021.
2. Wilensy S.E., Teitelbaum J.B., Essentials of Health Policy and Law (4 edn), Jones&Bartlett Learning, 2019.
3. Parker E., Correa-Velez I., Introduction to Public Health (4 edn), Elsevier Publisher 2019.

Supplementary

1. Boslaugh S.E., Health Care Systems Around the World. A Comparative Guide, Sage Publications, Inc. 2013.

8. VERIFYING THE EFFECT OF LEARNING

Code of the course effect of learning	Ways of verifying the effect of learning	Completion criterion
D.W1; D.W8; D.W14; D.W17; G.W1; G.W4; G.W5; G.W6; B.U10; D.U3; D.U9; D.U15; E.U38; G.U1; G.U2; G.U3; G.U4; G.U5	Active participation in e-learning seminars. Active participation in seminars	Successful completion of the seminars in e-learning form. Successful completion of the seminars.
D.W1; D.W8; D.W14; G.W1; G.W4; G.W5; G.W6; B.U10; D.U3; D.U9; E.U38; G.U1; G.U3; G.U4; G.U5	The course ends without a grade (only receiving credit) and will be verified on the basis of: • active participation in e-learning seminars; • active participation in seminars; • final test exam on the e-learning platform.	Passing the final exam.
K1; K2; K3; K4; K5; U1; W1; W2	Positive assessment of acquired skills obtained by the teacher.	

9. ADDITIONAL INFORMATION

1. Available educational materials present the most important information on the theory and practice of public health.
2. The person responsible for teaching in a given year: dr hab. Magdalena Łoś; email: mbogdan@wum.edu.pl Information about the duty hours and the class rules are available in the unit.
3. The Student Scientific Society of Healthcare Management run by the Department of Social Medicine and Public Health of the Medical University of Warsaw is supervisored by dr hab. Magdalena Łoś, mbogdan@wm.edu.pl). Information about The Student Scientific Societies is available on the Department's website: https://msizp.wum.edu.pl/

ATTENTION

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VOCATIONAL TRAINING:

Emergency Medicine – 2 weeks – 70h
Obstetrics & Gynecology – 2 weeks - 70h
5th year, 6-year program ED students
Faculty of Medicine

Upon completion of their fifth year of study students are required to take one-month summer clinical clerkships including a two-week training at the Department of Obstetrics & Gynecology and subsequently a two-week practical course in the Emergency Medicine Ward at a teaching hospital in Poland or selected foreign countries. The clerkships are a part of the medical curriculum mandatory to be granted a pass to enter the sixth year of the study.

The head of the Ob/Gyn Department, the Emergency Medicine ward or an appointed instructor in charge is responsible for providing a detailed program of the practical training course and duty schedules. They also supervise and carry out the final assessment of students' clinical performance.

The duties carried out by the student are those of a regular physician / surgeon, however, under professional supervision of the instructors.

During their training students are expected to perform two twenty-four hour shifts (two on each ward) when they shadow the physician / surgeon in charge and assist or do the regulator work.

The fifth-year training aims at using the theoretical background students obtained in their courses (gynecology, obstetrics, infectious diseases, internal diseases, paedriatric diseases, emergency medicine, neurology, imaging diagnostics, anesthetics etc.) developing and/or improving practical skills.

<u>The program at the G&O ward provides instruction in the following aspects:</u>

1. organization and functioning of the Obstetric Admissions Department, Labor Ward and Maternity Ward;
2. admitting the patient, setting up the patient's records, carrying out activities with respect to the patient's personal toilet;
3. monitoring the stages of labor, completing the chart of the labor course with a particular focus on parameters with respect to the maternal and fetal status;
4. delivering the patient under a close supervision of an obstetrician and midwife;
5. assistance in suturing the perineum;
6. post-delivery assessment of the placenta;
7. instruction in operating diagnostic devices (e.g. amnioscope, pulse rate detector etc.);
8. assisting in the Caesarian section

9. organization and management of work at the Gynecological Admission Department and in the Gynecological Ward;
10. principles of gynecological examination;
11. criteria used for qualifying patients for operation;
12. management of work in the treatment room, completing and filing records, collecting samples for histopathological and cytological examination;
13. assisting in gynecological surgical procedures;
14. early postoperative monitoring, completing the patients' chart;
15. management of patients admitted for threatened abortion;
16. principles of prevention of neoplasia of the female genital organs and breast;

The goals of the instruction provided in the Emergency Medicine 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).

Throughout the course of training students are expected to make records of their activities and procedures performed. They are also assessed by the instructor in charge and are finally granted their passing mark by the head of the department. Certificates written in English or translated should be submitted to the Dean's Office of the Medical University of Warsaw by September 20th of the subsequent academic year.