



MEDICAL
UNIVERSITY
OF WARSAW



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

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

3rd YEAR CURRICULUM

6-year program

Academic year: 2026/2027

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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 Jarzab, MA

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

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

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Events Coordinator – Divit Amarnani

www: <https://ed.wum.edu.pl/edsq>
<https://edsqmuw.wixsite.com/wumedsq>

CLASS REPRESENTATIVE:

Deya Aldeen Anas Turki
Al-Drabee – 3 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 3rd year of 6-year 2026/2027 ED program and the list of contents

3rd year

page	subject	form of credit	semester	total no of hours	including				ECTS
					lecture	seminar	class	practical	
5	Genetics	exam	2	30	2	11	17		2
10	Microbiology	exam	1&2	80		10	70		6
18	Pathomorphology	exam	1&2	128	30	33	65		16
25	Laboratory Diagnostics	exam	2	45	5	15	25		2
31	Pharmacology and Toxicology	exam	1&2	100	30	10	60		9
37	Polish for Medicine-Communication Skills In Medicine	exam	1&2	60			60		3
43	Radiology	credit	1	40	10	6	24		2
47	Oncogenetics	credit	2	15		3	12		1
52	Introduction to Internal Medicine	credit	1&2	101	10	20	71		6
59	Medical Communication	credit	1	35	5	18	12		2
64	Introduction to Pediatrics	credit	1&2	60		20	40		4
70	Oral and Maxillofacial Surgery and Propaedeutic of Stomatology	credit	2	30		20	10		1
75	Public health	credit	2	30	10	20			2
	Optional course	credit	1&2	60		60			4
80	Vocational training - Internal medicine	credit	2	120				120	4
				934	102	246	466	120	64



GENETICS - CLINICAL

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 Medical Genetics Center for Biostructure Research, First Faculty of Medicine ul. Pawińskiego 3c, 02-106 Warszawa phone: +48 22 572 06 95, fax: +48 22 572 06 96 http://www.genetyka.wum.edu.pl e-mail: krzysztof.szczaluba@wum.edu.pl
Head of Educational Unit / Heads of Educational Units	Head of the Department: Rafał Płoski MD PhD
Course coordinator	Assoc. prof. Krzysztof Szczaluba MD PhD e-mail: krzysztof.szczaluba@wum.edu.pl tel. 22 572 06 95
Person responsible for syllabus	Assoc. prof. Krzysztof Szczaluba MD PhD e-mail: krzysztof.szczaluba@wum.edu.pl tel. 22 572 06 95
Teachers	Rafał Płoski MD PhD Andrzej Kochański MD PhD Krzysztof Szczaluba MD PhD Jennifer Castaneda MD PhD

	Katarzyna Kuśmierska PhD Snir Boniel MD Jan Szumlicki MD
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2. BASIC INFORMATION

Year and semester of studies	3rd Year and 5th Semester	Number of ECTS credits	2.00
FORMS OF CLASSES		Number of hours	ECTS credits calculation
Contacting hours with academic teacher			
Lecture (L)		2	0.08
Seminar (S)		11	0.44
Classes (C)		17 (live, contact classes:17)	0.68
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	– knowledge of causes, symptoms, principles of diagnosis and therapeutic management within the scope of the most frequent genetic disorders in the population; – basic information in genetics, such as modes of inheritance and classification of genetic disorders,
O2	– application of diagnostic tests – understanding cytogenetic and molecular tests results; – skills to communicate genetic information to patients and their families.
O3	– ability to verify indications for pre- and postnatal diagnostics; – ability to make a decision on the necessity of performing genetic tests and choosing appropriate tests; – ability to gather and analyze medical genetic history and draw pedigrees,

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

Code and number of effect of learning in accordance with standards of learning	Effects in the field of: <i>(in accordance with appendix to the Regulation of Minister of Science and Higher education from 29th of September 2023)</i>
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Knowledge – Graduate* knows and understands:

C.W1	normal human karyotype and rules of sex determination
C.W2	genetic causes of hereditary predisposition to cancer
C.W3	principles of inheritance of different numbers of traits, inheritance of quantitative traits, independent inheritance of traits and inheritance of extra-nuclear genetic information
C.W4	the genetic determinants of human blood groups and serological conflict in the Rh system
C.W5	genetic determinants of the most common single-gene, polygenic and multifactorial diseases, basic chromosome aberration syndromes, syndromes caused by genomic rearrangements, polymorphisms, epigenetic and post-transcriptional changes
C.W6	factors affecting the primary and secondary genetic balance of the population
C.W7	genetic determinants of congenital malformations and selected rare diseases and the possibility of their prevention
C.W8.	genetic diagnostic methods and the basic indications for their use
C.W26.	pathogenesis of diseases, including genetic and environmental conditions
C.W33	options and types of biological, cellular, gene and targeted therapies for specific diseases
E.W36	causes, symptoms, principles of diagnosis and therapeutic management of the most common genetic diseases in children and adults

Skills– Graduate* is able to:

C.U1.	chart and analyse bloodline and identify clinical and bloodline features suggestive of a genetic basis for diseases
C.U2.	make decisions on the need for cytogenetic and molecular tests
C.U3.	read basic genetic test results, including karyotypes
C.U4.	determine genetic risk based on bloodline and genetic test result for chromosomal aberrations, genomic rearrangements, single-gene and multifactorial diseases

* In appendix to the Regulation of Minister of Science and Higher education from 29th of September 2023 „graduate”, not student is mentioned.

5. ADDITIONAL EFFECTS OF LEARNING (non-compulsory)

Number of effect of learning	Effects in the fields of:
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Knowledge – Graduate knows and understands:

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Skills– Graduate is able to:

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Social Competencies – Graduate is ready for:

K1-K8	establishing and maintaining a deep and respectful contact with the patient, as well as showing understanding for worldview and cultural differences be guided by the good of the patient observance of medical confidentiality and patient's rights taking actions towards the patient based on ethical principles, with the awareness of social conditions and limitations resulting from the disease perceiving and recognizing own limitations and self-assessment of deficits and educational needs promoting pro-health behavior use of objective sources of information formulating conclusions from own measurements or observations
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6. CLASSES		
Form of class	Class contents	Effects of Learning
Lecture 1	‘Clinical evaluation, organization of care and therapeutic management of genetic disorders.’ The lecture contains examples of more common genetic disorders along with the methods of their clinical diagnosis, both in the pre- and postnatal aspect. The second part shortly describes therapeutic management of genetic conditions as well as organization of care in patients with rare disorders.	C.W1, C.W2, C.W3, C.W4, C.W5, C.W6, C.W7, C.W8, C.W26, C.W33, E.W36
Lecture 2	‘Diagnostics and discovery of new genetic diseases in the age of next generation sequencing (NGS)’ The lecture presents the diagnostic possibilities of the exome sequencing (WES) technique on specific examples of new genetic disorders.	
Seminars and Practice	Reproductive genetics with elements of prenatal diagnosis Personalized pediatrics Microcephaly Neurometabolism and Metabolic disorders Familial hypercholesterolaemia Monogenic diabetes Genetic disorders with dysmorphism Clinical cytogenetics Neurogenetics Gene therapies	
Practice Classes	PC1 Cytogenetics and dysmorphology PC2. Tasks - clinical cases in pediatrics and prenatal diagnosis PC3. Quiz - questions and answers (the most common genetically conditioned diseases and methods of their diagnosis and therapy) PC4. Neurogenetics and Gene Therapies All live classes in the room (contact exercises)	C.W1, C.W2, C.W3, C.W4, C.W5, C.W6, C.W7, C.W8, C.W26, C.W33, E.W36, C.U1, C.U2, C.U3, C.U4, K1 – K8
Additional materials	List of 28 genetic syndromes	

7. LITERATURE
Obligatory
Medical Genetics Jorde, Carey, Bamshad 4th Edition Elsevier
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
C.W1, C.W2, C.W3, C.W4, C.W5, C.W6, C.W7, C.W8, C.W26, C.W33, E.W36, C.U1, C.U2, C.U3, C.U4, K1 – K8 and from 2nd yr syllabus: C.W1, C.W3, C.W5, C.W6, C.W7, C.W8, C.W26, C.U1, C.U2, C.U3, C.U4, K1	Exam (test) 50 questions	Answering correctly to more than 50% of questions	
	Participation in live tasks	Verification of student's presence and activities	
	Oral report on performed tasks	Correctly performed tasks	
	Observation of student's behavior and interactions	Command of social competencies	

9. ADDITIONAL INFORMATION

Students are obliged to attend a lecture, as well as all seminars and classes. No absence is accepted during classes. An absence on classes and seminars will have to be covered with another group. Change of groups is possible only as an exchange with a person from another group. Being late for over 15 minutes counts as an absence.

Person responsible for students affairs: Assoc. prof. Krzysztof Szczaluba, MD, PhD krzysztof.szczaluba@wum.edu.pl

Evaluation criteria

Form of passing the course: exam (test). The exam evaluates the abilities and knowledge gained during the Genetics course during the fourth and sixth semesters of the studies (2nd and 3rd years).

Grade	Criteria
2,0	Not getting over 50% of points
3,0	Getting at least 51% of points
3,5	Getting at least 61% of points
4,0 (good)	Getting at least 71% of points
4,5 (above good)	Getting at least 81% of points
5,0 (very good)	Getting at least 91% of points

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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.



Microbiology

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/ Exam
Educational Unit / Educational Units	Chair and Department of Medical Microbiology 5 Chałubińskiego Street, 02-004 Warsaw, Poland (+48 22) 628 27 39 http://mikrobiologia.wum.edu.pl e-mail: mikrobiologia@wum.edu.pl
Head of Educational Unit / Heads of Educational Units	Prof. dr hab. Hanna Pituch e-mail: hanna.pituch@wum.edu.pl
Course coordinator	Dr n. med. Robert Kuthan e-mail: robert.kuthan@wum.edu.pl
Person responsible for syllabus	Dr n. med. Robert Kuthan e-mail: robert.kuthan@wum.edu.pl
Teachers	dr n. med. Robert Kuthan dr n. med. Szymon Walter de Walthoffen dr hab. n. med. Anna Henriques dos Santos de Sepulveda mgr biol. Kinga Markowska

2. BASIC INFORMATION

Year and semester of studies	Year 3, Semesters 5 and 6 (winter and summer)	Number of ECTS credits	6.00
FORMS OF CLASSES		Number of hours	ECTS credits calculation
Contacting hours with academic teacher			
Lecture (L)			
Seminar (S)		10	0.4
Classes (C)		70	3.0
e-learning (e-L)			
Practical classes (PC)			
Work placement (WP)			
Unassisted student's work			
Preparation for classes and completions		70	2.6

3. COURSE OBJECTIVES	
O1	The student will acquire knowledge of the pathogenicity of bacteria, viruses, and fungi, the epidemiology of infectious diseases, and the importance of a healthy human microbiota.
O2	The student will learn the principles of microbiological diagnostics, including specimen selection, diagnostic methods used in the detection of infections, diagnostic algorithms, the limitations of individual methods, and the impact of pre-analytical errors on the reliability of test results.
O3	The student will learn the principles of interpreting microbiological test results, including culture findings, Gram stain results, serological tests, molecular biology methods, and antimicrobial susceptibility testing.
O4	The student will develop basic skills in planning microbiological diagnostics, selecting appropriate tests, and interpreting their results in the context of the clinical presentation, taking into account colonization, infection, and contamination.
O5	The student will learn the principles of rational antimicrobial therapy, mechanisms of antimicrobial resistance, and the role of microbiological test results in the selection and modification of treatment.
O6	The student will acquire the skills necessary to perform basic microbiological procedures, correctly collect and prepare specimens for analysis, and adhere to biosafety and infection control principles.
O7	The student will develop competencies required for effective collaboration with microbiology laboratories and healthcare teams, communication of information related to the diagnosis and prevention of infections, and the use of reliable sources of knowledge for continuous professional development.

4. STANDARDS OF LEARNING – DETAILED DESCRIPTION OF EFFECTS OF LEARNING
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Code and number of the effect of learning in accordance with standards of learning	Effects in the field of: <i>(in accordance with appendix to the Regulation of Minister of Science and Higher education from 29th of September 2023)</i>
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Knowledge – Graduate* knows and understands:

C.W9	genetic mechanisms of drug resistance acquisition by microorganisms and cancer cells and their relationship to the need for individualisation of pharmacotherapy;
C.W10	micro-organisms including pathogenic and those constituting the human microbiome, and human-invasive forms or life stages of selected parasites;
C.W11	the epidemiology of viral, bacterial, fungal and prion infections and parasitic infections, including their geographical distribution;
C.W12	the pathogenesis and pathophysiology of infections and contagions and the impact of pathogens such as viruses, bacteria, fungi, prions and parasites on the human body and population, including their modes of action, the consequences of exposure to them and the principles of prevention;
C.W13	the consequences of exposure of the human body to chemical and physical agents and the principles of prevention;
C.W14	aetiology, pathogenesis, pathophysiology, routes of transmission, forms and prevention of iatrogenic infections;
C.W15	methods used in microbiological and parasitological diagnosis (indications, principles of performance, interpretation of results);
C.W16	diagnostic principles for infectious, allergic, autoimmune and neoplastic diseases and blood diseases, based on the antigen-antibody reaction;
C.W17	principles of disinfection, sterilisation and aseptic management;
C.W32	the problem of drug resistance, including multidrug resistance, and the principles of rational antibiotic therapy;

Skills– Graduate* is able to:

C.U5	identify pathogens under the microscope;
C.U6	interpret microbiological test results;
C.U10	design rational chemotherapy regimens for infections - empirical and targeted;

* In appendix to the Regulation of Minister of Science and Higher education from 29th of September 2023 „graduate”, not student is mentioned.

5. ADDITIONAL EFFECTS OF LEARNING (non-compulsory)

Number of effect of learning	Effects in the fields of:
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Knowledge – Graduate knows and understands:

K1	
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K2	
Skills– Graduate is able to:	
S1	
S2	
Social Competencies – Graduate is ready for:	
SC1	recognize and acknowledge their own limitations in terms of knowledge, skills, and social competences, as well as self-assess their deficits and educational needs.
SC2	use objective sources of information

6. CLASSES		
Form of class	Class contents	Effects of Learning
Classes Module I	1. Pathogenic properties of microorganisms. Basics of diagnostics of bacterial infections. The microbiota and its role in human health.	C.W10., C.W15., C.W16.
	2. Hospital hygiene. Sterilization and disinfection. Methods of controlling the purity of air, surfaces, and water.	C.W17.
	3. Gram-positive and Gram-negative cocci.	C.W10., C.W11., C.U5.
	4. Gram-negative bacilli.	C.W10., C.W11., C.U5.
	5. Mycobacteria and other Gram-positive rods and aerobic spore-forming bacilli.	C.W10., C.W11., C.U5.
	6. Bacteria growing anaerobically.	C.W10., C.W11., C.U5.
	7. Chlamydia, mycoplasma, rickettsia, spirochetes.	C.W10., C.W11., C.U5.
	8. Pathogenic fungi. Mycotoxins and mycoallergens. Antifungal drugs.	C.W10., C.W11., C.U5.
Classes Module II	9. Antimicrobial treatment. Antibiotics and chemotherapeutics. Principles of rational antibiotic therapy. Bacterial resistance to antibiotics. Susceptibility testing methods.	C.W9., C.W32., C.U6.
	10. Viruses, general characteristics and methods of identifying infections, antiviral drugs.	C.W9., C.W11., C.W15.
	11. DNA viruses.	C.W10., C.W11., C.W12., C.U6.
Module III	12. RNA viruses.	C.W10., C.W11., C.W12., C.U6.
	13. Respiratory tract infections.	C.W12., C.W16., C.U5., C.U6., C.U10.
	14. Infections of the skin, wounds, bones, and joints.	C.W12., C.W16., C.U5., C.U6., C.U10.
	15. Urinary tract infections.	C.W12., C.W16., C.U6., C.U10.
	16. Gastrointestinal tract infections.	C.W12., C.W16., C.U6., C.U10.
	17. Infections of the nervous system. Prion diseases.	C.W12., C.W16., C.U5., C.U6., C.U10.

	Seminars	1. Cardiovascular infections. Zoonotic infections. Bioterrorism.	C.W12., C.W16., C.U5., C.U6., C.U10.
		2. Sexually transmitted microorganisms. Vertical and perinatal infections.	C.W12., C.W16., C.U5., C.U6.
		3. Healthcare-associated infections. Infections prevention.	C.W13., C.W14., C.W16., C.U10.

7. LITERATURE

Obligatory

1. Textbook of Diagnostic Microbiology, C. R. Mahon, D. C. Lehman, 6th Ed., Elsevier 2019 or 7th Ed., Elsevier 2022.
2. Training materials provided by the Chair and Department of Medical Microbiology on the e-learning platform.

Supplementary

1. Medical Microbiology, Jawetz, Melnick, & Adelberg's Medical Microbiology, 28th ed. New York, McGraw-Hill, 2019.
2. The European Committee on Antimicrobial Susceptibility Testing – EUCAST - Guidelines and Rationale Documents. <https://www.eucast.org/>
3. Medical Microbiology, P.R. Murray, K.S. Rosenthal and M.A. Pfaller. Elsevier. 9th ed. 2020.

8. VERIFYING THE EFFECT OF LEARNING

Code of the course effect of learning	Ways of verifying the effect of learning	Completion criterion
	Attending classes.	Verification of attendance and active participation during classes.
C.W9 C.W10 C.W11 C.W12 C.W13 C.W14 C.W15 C.W16 C.W17 C.W32 C.U5 C.U6 C.U10 SC1 SC2	Colloquium 1 scope of topics: classes carried out as part of Module I; theoretical colloquium, oral, 4 questions. Colloquium 2 scope of topics: classes carried out as part of Module II; theoretical colloquium, written, 4 questions. Retake tests (1 and 2) are oral; committee colloquiums are written (2 assistants check answers). Colloquium 3 scope of topics: completed as part of Module III (classes and seminars), Practical, oral colloquium, three tasks. Students are entitled to two resit attempts in accordance with the Medical University of Warsaw Study Regulations (2026). Resit colloquia are conducted in an oral examination format.	Response to all questions. Assessment based on a 0-6 point scale. To pass each colloquium, students must meet both of the following criteria: 1. Answer all questions. Receiving 0 points for any question results in an automatic failure of the colloquium, regardless of the total score obtained. 2. Achieve at least 50% of the maximum possible score.
	Completion of tasks included in the e-learning platform	Completion of at least three case-based learning activities available on the e-learning platform.

		For each selected case, students are required to provide answers to questions related to microbiological diagnostics, treatment, and/or infection prevention.
	Observation and evaluation of the student's performance by the course instructor.	Satisfactory achievement of the intended learning outcomes in terms of knowledge, skills, and competencies, and the ability to apply the acquired competencies in practice.
	Exam, summer examination session, MCQ	Each question is graded on a point scale: 0 or 1 (0 points – incorrect answer or no answer, 1 point – correct answer. Maximum number of points to obtain: 80. The criterion for passing the exam is obtaining a minimum of 45 points. Score thresholds and corresponding grades: 2.0 (fail) – 0–44 points; 3.0 (satisfactory) – 45–52 points; 3.5 (better than satisfactory) – 53–59 points; 4.0 (good) – 60–66 points; 4.5 (better than good) – 67–73 points; 5.0 (very good) – 74–80 points.

9. ADDITIONAL INFORMATION

IMPORTANT!

This course is included in the scope of material covered by the **Objective Structured Clinical Examination (OSCE)**, which will be administered during the **4th year of study**.

Detailed information about the examination is available at: www.osce.wum.edu.pl/wl

As part of the OSCE examination, students will be assessed on the achievement of learning outcomes related to **practical skills** and **professional competencies** acquired during the microbiology course.

Learning Outcomes Assessed During the OSCE Examination

A. Pathogenic Potential of Microorganisms

1. Identifies clinical situations requiring urgent microbiological diagnostics.
2. Identifies the most likely etiological agent of an infection based on the clinical presentation, epidemiological history, and risk factors.

B. Microbiological Diagnostics

1. Correctly completes a microbiological test request form.
2. Selects the appropriate biological specimen for microbiological testing, identifies proper collection and transport procedures, and correctly labels the specimen.
3. Correctly performs biological specimen collection procedures (throat, nasal, and wound swabs).
4. Provides patients with appropriate instructions regarding preparation for testing and self-collection of specimens (urine, stool, sputum).

5. Selects the appropriate microbiological diagnostic method for a given clinical situation and justifies the choice, taking into account its diagnostic value, limitations, and turnaround time.
6. Interprets Gram stain results and explains their significance for further diagnostic and therapeutic management.
7. Interprets microbiological culture results, considering the possibility of contamination, colonization, or infection.
8. Interprets serological test results, taking into account the dynamics of the immune response, the stage of infection, and methodological limitations.
9. Interprets results obtained using molecular biology methods, considering their clinical significance and diagnostic limitations.
10. Proposes further diagnostic procedures when test results are inconclusive or inconsistent with the clinical presentation.
11. Formulates a diagnostic conclusion based on microbiological test results, clinical data, and the quality of the collected specimen.

C. Antimicrobial Therapy: Antimicrobial Susceptibility Testing and Mechanisms of Resistance

1. Interprets antimicrobial susceptibility testing results.
2. Proposes antimicrobial therapy based on the probable etiological agent, clinical presentation, and local epidemiological data (empirical therapy).
3. Assesses the impact of antimicrobial resistance mechanisms on therapeutic options and the need for epidemiological interventions.
4. Proposes measures to limit the development of antimicrobial resistance, including antimicrobial stewardship and treatment de-escalation.

D. Prevention and Control of Healthcare-Associated Infections

1. Correctly performs hand hygiene and identifies situations in which hand hygiene is required.
2. Selects appropriate personal protective equipment according to the route of transmission, type of medical procedure, and exposure risk.
3. Recognizes indications for patient isolation and selects the appropriate type of isolation based on the mode of transmission.
4. Understands procedures following occupational exposure to potentially infectious material, including risk assessment and post-exposure prophylaxis measures.
5. Recognizes infections subject to mandatory reporting to public health authorities and identifies situations requiring epidemiological action.
6. Identifies situations requiring consultation with the infection prevention and control team and implementation of measures to limit the transmission of alert pathogens.

E. Communication

1. Communicates effectively with the microbiology laboratory to obtain, supplement, or interpret test results and to ensure proper handling and preservation of diagnostic specimens.

Practical classes and seminars are conducted at the **Department of Medical Microbiology, Professor Edmund Mikulaszek Lecture Room, Anatomicum Building, 2nd Floor, 5 Chałubińskiego Street** (corner of Oczki Street).

It is necessary to have protective clothing (cotton apron) during classes.

The laboratory classes are organized as practical activities. Students will be working with infectious material; therefore, the following rules have to be obeyed:

- hands must be washed and/or disinfected after each class,
- jewelry must be removed from hands/wrists for the time of classes.
- long hair must be tied back,
- outer coats must be left in the cloakroom downstairs,
- protective gowns must be used in the laboratory classroom (brought to the first laboratory class and stored at the Department of Medical Microbiology for the duration of the course),
- eating, drinking, smoking (incl. e-cigarettes) is strictly forbidden.

Classes are conducted according to the schedule established by the **Dean's Office of the Faculty of Medicine, Medical University of Warsaw**. Detailed course regulations are available on the Department website: <https://mikrobiologia.wum.edu.pl>.

Class schedules, teaching materials, course information, assessment criteria, and announcements are published on the **e-WUM platform**.

The person responsible for course organization is **Dr Robert Kuthan** (Room 05, e-mail: robert.kuthan@wum.edu.pl). Teaching assistants are available to students during designated consultation hours. The consultation schedule can be found on the Department's website: <https://mikrobiologia.wum.edu.pl>

Students are required to comply with the **Regulations for Educational Activities of the Department of Medical Microbiology** as well as the **Study and Examination Regulations of the Medical University of Warsaw**.

Rules for Participation in Classes

1. Students must wear appropriate protective clothing during classes (a cotton laboratory coat).
2. Students are expected to be prepared for every class.
As a preparation for the classes, before each class, students should read a subject-related chapter from one of the books listed in Section 7 – Obligatory literature.
Preparation may be assessed through short quizzes, written or oral tests, or other forms of evaluation. Three instances of unpreparedness require the student to complete the material at an additional assessment session.
3. Students are required to attend classes with their assigned group. Group changes are permitted only in exceptional circumstances and require approval from the faculty member responsible for student affairs.
4. Attendance at all practical classes and seminars is mandatory.
Classes start on time. Any student who comes late will not be allowed to enter the classroom.
Students arriving more than 15 minutes late for a class will be marked absent. All students are expected to attend classes punctually and actively participate in the educational activities.
Laboratory classes are composed of theoretical and practical parts, both of which are obligatory to participate in.
Seminar classes are compulsory to participate in.
5. All absences, including excused absences, must be compensated for by making individual arrangements with the teaching assistant concerning the form, method, and timing of the make-up session.

A prerequisite for admission to the final examination is **attendance at all classes** and obtaining a **passing grade in each colloquium**. The final examination is held during the **summer examination session** and consists of **80 single-best-answer multiple-choice questions**.

Examination duration: 80 minutes.

Students have the opportunity to participate in research activities within the Department through the following **Student Scientific Associations**:

- **Student Scientific Association at the Department of Medical Microbiology, Medical University of Warsaw**
Supervisor: **Dr Ksenia Szymanek-Majchrzak, MD, PhD**
e-mail: ksenia.szymanek-majchrzak@wum.edu.pl
- **Mucor Student Scientific Association of Mycology**
Supervisor: **Dr Robert Kuthan**
e-mail: rkuthan@wum.edu.pl
- **MACR-S (Microbiology Applied to Clinics and Real-life for Students), Student Scientific Association at the Department of Medical Microbiology, Medical University of Warsaw**
Supervisor: **Dr Robert Kuthan**
e-mail: rkuthan@wum.edu.pl

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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



Pathomorphology

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/ Exam
Educational Unit / Educational Units	Katedra Patomorfologii (1M111) ul. Pawińskiego 3b, 02-106 Warszawa tel.: 22-599-16-70 e-mail: patomorfologia@wum.edu.pl https://patomorfologia.wum.edu.pl/
Head of Educational Unit / Heads of Educational Units	Prof. dr hab. n. med. Agnieszka Perkowska-Ptasińska agnieszka.perkowska-ptasinska@wum.edu.pl
Course coordinator	Lek. Paweł Pihowicz pawel.pihowicz@wum.edu.pl
Person responsible for syllabus	Lek. Paweł Pihowicz pawel.pihowicz@wum.edu.pl
Teachers	Lek. Paweł Pihowicz pawel.pihowicz@wum.edu.pl Lek. Krzysztof Domka krzysztof.domka@wum.edu.pl Karol Kulbaka karol.kulbaka@wum.edu.pl dr n. med. Aleksandra Starzyńska Kubicka aleksandra.starzynska@wum.edu.pl

	dr hab. n. med. Łukasz Koperski lukasz.koperski@wum.edu.pl lek. Nastassia Lukashevich, nastassia.lukashevich@wum.edu.pl dr n. med. Magdalena Bogdańska magdalena.bogdanska@wum.edu.pl
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2. BASIC INFORMATION

Year and semester of studies	Year III semester 5-6	Number of ECTS credits	16
FORMS OF CLASSES	Number of hours	ECTS credits calculation	
Contacting hours with academic teacher			
Lecture (L)	30	1,2	
Seminar (S)	33	1,4	
Classes (C)	65	2,6	
e-learning (e-L)			
Practical classes (PC)			
Work placement (WP)			
Unassisted student's work			
Preparation for classes and completions	272	10,8	

3. COURSE OBJECTIVES

C1	Introduce students to the fundamental concepts and major challenges of contemporary pathology.
C2	Explain the mechanisms responsible for the development of the most important disease processes.
C3	Ability to correlate the macroscopic and microscopic features of tissues and organs with clinical findings.
C4	Develop competence in recognizing common diseases using light microscopic examination.
C5	Familiarize students with autopsy techniques and their role in modern medical practice.
C6	Develop the ability to integrate pathological findings with information from other diagnostic sources to improve the diagnosis of major diseases, including cardiovascular diseases, neoplasms, diabetes mellitus and other civilization-related disorders.

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

Code and number of the effect of learning in accordance with standards of learning	Effects in the field of: <i>(in accordance with appendix to the Regulation of Minister of Science and Higher Education from 29th of September 2023)</i>
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Knowledge – Graduate* knows and understands:

C.W23	The clinical course of specific and non-specific inflammatory diseases and the mechanisms of tissue and organ regeneration.
C.W24	The etiology, mechanisms and consequences of hemodynamic disorders.
C.W25	Organ pathology, macroscopic and microscopic pathological changes, their clinical consequences, and pathological terminology.

Skills– Graduate* is able to:

C.U7	Correlate tissue and organ pathology with clinical manifestations, medical history and laboratory findings in order to establish the diagnosis of the most common diseases affecting adults and children.
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In the appendix to the Regulation of the Minister of Science and Higher Education of 29 September 2023, the term “graduate”, rather than “student”, is used.

5. ADDITIONAL EFFECTS OF LEARNING (non-compulsory)

Number of effect of learning	Effects in the fields of:
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Knowledge – Graduate knows and understands:

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Skills– Graduate is able to:

--	--

Social Competencies – Graduate is ready for:

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6. CLASSES

Form of class	Class contents	Effects of Learning
Lectures	1. Introductory Lecture 2. Types and Mechanisms of Death, Types and Techniques of Autopsy, Legal Basis for Performing Autopsies 3. Diseases of the Heart and Blood Vessels 4. Neuropathology 5. Non-neoplastic Diseases of the Skin 6. Non-neoplastic Diseases of the Gastrointestinal Tract 7. Non-neoplastic Diseases of the Liver 8. Non-neoplastic Diseases of the Kidneys 9. Diagnostic Pathology of Lung Diseases 10. Pediatric Neoplasms	1. C.W25 2. C.W25 3. C.W24 4. C.W25 5. C.W23, C.W25 6. C.W23, C.W25 7. C.W23, C.W25 8. C.W23, C.W25 9. C.W23, C.W25 10. C.W25

	11. Colorectal Carcinoma 12. Gastric Carcinoma 13. Endocrine Neoplasms 14. Soft Tissue Tumors 15. Bone Tumors	11. C.W25 12. C.W25 13. C.W25 14. C.W25 15. C.W25
Seminars	1. Cellular Adaptation 2. Inflammation 3. Hemodynamic Disorders 4. Immunological Disorders 5. Epithelial Neoplasms 6. Bone and Soft Tissue Tumors 7. Neoplasms of the Hematopoietic and Lymphoid Systems 8. Vascular Pathology	1. C.W25, C.U7 2. C.W23, C.U7 3. C.W24, C.U7 4. C.W23, C.W25, C.U7 5. C.W25, C.U7 6. C.W25, C.U7 7. C.W25, C.U7 8. C.W24, C.W25, C.U7
Classes	(Afternoon Practical Classes / Microscopy) 1. Dermatopathology 2. Neoplastic Diseases of the Gastrointestinal Tract 3. Pathology of the Liver and Biliary Tract 4. Head and Neck Pathology 5. Respiratory Tract Pathology 6. Endocrine Pathology 7. Pathology of the Male Reproductive System 8. Pathology of the Female Reproductive System 9. Breast Pathology 10. Urinary Tract Pathology	1. C.W25, C.U7 2. C.W25, C.U7 3. C.W25, C.U7 4. C.W25, C.U7 5. C.W25, C.U7 6. C.W25, C.U7 7. C.W25, C.U7 8. C.W25, C.U7 9. C.W25, C.U7 10. C.W25, C.U7
	(Morning Practical Classes / Gross Pathology) 1. Introduction to Gross Pathology Practical Classes 2. Liver and Pancreas 3. Gynecologic Pathology 4. Gastrointestinal Tract 5. Urinary Tract 6. Lung 7. Head and Neck 8. Endocrine System 9. Pediatric Pathology 10. Gross Pathology Practical Examination	1. C.W25, C.U7 2. C.W25, C.U7 3. C.W25, C.U7 4. C.W25, C.U7 5. C.W25, C.U7 6. C.W25, C.U7 7. C.W25, C.U7 8. C.W25, C.U7 9. C.W25, C.U7 10. C.W25, C.U7

7. LITERATURE

Obligatory

Kumar V, Abbas AK, Aster J: Robbins Basic Pathology
11th edition (2022)

Supplementary

8. VERIFYING THE EFFECT OF LEARNING

Code of the course effect of learning	Ways of verifying the effect of learning	Completion criterion
C.W23, C.W24, C.W25	Short quizzes or oral questioning during practical classes and microscopy seminars to assess students' preparation for the classes.	Assessment by the instructor
	Lectures – after attending each lecture, students are required to complete a single-best-answer (SBA) multiple-choice quiz . The number of questions may vary depending on the lecture topic. The quizzes will be made available on the e-learning platform . https://e-learning.wum.edu.pl/	100% correct answers.
	Progress Assessments – Five centrally administered progress assessments are held throughout the course (two in the winter semester and three in the summer semester). Each assessment consists of a 30-question single-best-answer (SBA) multiple-choice test . The assessments are administered by the WUM Office for Quality and Innovation in Education . Resit Progress Assessments – The format and date are determined individually by the course instructor. The resit assessment must be completed by the end of the semester in which the first attempt took place. Examination Board Assessment – Held at the end of the summer semester for students who have failed no more than two resit progress assessments. In such cases, both assessments are retaken on the same day. Failure to pass three resit progress assessments or the Examination Board Assessment results in failure of the course and ineligibility to sit the final examination.	Grading thresholds (first attempt): -3 ≥ 18pkt -3,5 ≥ 21pkt -4 ≥ 24pkt -4,5 ≥ 27pkt -5 ≥ 29pkt
	Final Examination (summer examination session) – Written component: a 50-question single-best-answer (SBA) multiple-choice examination , with a time limit of 50 minutes . The examination is administered by the WUM Office for Quality and Innovation in Education . Resit Examination (resit examination session; up to two attempts) – Single-best-answer (SBA) multiple-choice examination. Students are required to retake only the component(s) of the examination that they did not pass.	Passing threshold: 30 points. The final grade is calculated based on the combined score obtained in the written (theoretical) component and the practical (skills) component (see below).
C.U7	Oral assessment of the Morning (Gross Pathology) Practical Classes , conducted on the last day of the practical course .	Assessment by the instructor
	Final Examination (summer examination session) – Practical (skills) component: a 50-question single-best-answer (SBA) multiple-choice examination , with a time limit of 75 minutes . The examination is administered by the WUM Office for Quality and Innovation in Education . Resit Examination – Two resit examination attempts are available during the resit examination session . Each resit consists of a single-best-answer (SBA) multiple-choice examination . Students are required to retake only the component(s) of the examination that they did not pass.	Passing threshold: 30 points. The final course grade is calculated from the combined score obtained in the written (theoretical) component and the practical (skills) component (see below).
C.W23, C.W24, C.W25 C.U7		Grading thresholds – exam: -3 ≥ 60pkt -3,5 ≥ 71pkt -4 ≥ 81pkt -4,5 ≥ 91pkt -5 ≥ 96pkt Bonus points are added to the final examination score for students who achieve an average grade above 4.0 across all progress assessments

		passed at the first attempt, as follows: a) Average grade 4.01–4.25: 2 bonus points b) Average grade 4.26–4.50: 3 bonus points c) Average grade 4.51–5.00: 5 bonus points Bonus points are awarded only if the student has obtained at least 30 points in each component of the final examination (before the bonus points are added).
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9. ADDITIONAL INFORMATION

9. ADDITIONAL INFORMATION

A. MORNING (GROSS PATHOLOGY) PRACTICAL CLASSES

1. The Morning (Gross Pathology) Practical Classes are conducted over a **two-week period** and take place at the **Department of Pathology**, 3b Pawińskiego Street.
2. On the first day, students should assemble outside the **Lecture Hall** (3rd floor) and await their instructor. On subsequent days, classes will be held in the **Gross Pathology Practical Room** (ground floor). Students are required to wear their own laboratory coat. Protective gloves will be provided by the Department.
3. Attendance at **all Morning Practical Classes** is mandatory. Arrival more than **15 minutes late** will be recorded as an absence.
4. Students who are absent must contact the Department Office by e-mail (patomorfologia@wum.edu.pl) to arrange participation in a **gross examination of surgical specimens** in the gross pathology laboratory. In addition, they are required to prepare a written report covering the topic of the missed class. Detailed instructions regarding the assignment will be provided by the instructor who conducted the missed session.
5. The Morning Practical Classes conclude with an **oral assessment** on the final day of the block. Students with a single absence may be admitted to the assessment conditionally. Final credit will be awarded only after the absence has been made up in accordance with the regulations described above.
6. All absences must be made up **by the end of the semester** in which they occurred.
7. The detailed timetable, including topics, class times, and locations, is available on the Department's website.
8. Students are **strictly prohibited** from entering the practical room without an instructor, bringing bags or backpacks into the room, or taking photographs during classes.
9. Students enrolled under an **Individual Study Plan (ISP)** or **Individual Study Programme** who wish to attend classes with a group other than the one to which they have been assigned must submit a request, together with documentation confirming their individual study status, to the Department Office **no later than one week before the beginning of the relevant semester**.

B. AFTERNOON (MICROSCOPY) SEMINARS AND PRACTICAL CLASSES

1. These classes are held **throughout the academic year**. During the **winter semester**, they are conducted as seminars, while during the **summer semester**, they take the form of microscopy practical classes, according to the timetable issued by the Dean's Office.
2. Students are required to attend seminars and practical classes with their assigned teaching group. The only exception applies to students enrolled under an **Individual Study Plan (ISP)** or **Individual Study Programme**. Requests to transfer to another group, together with the required documentation, must be submitted to the Department Office **no later than one week before the beginning of the relevant semester**.
3. Arrival more than **15 minutes late** will be treated as an absence from the class.
4. Students are expected to prepare for each class using, in particular, the teaching materials available on the Department's website (www.patomorfologia.wum.edu.pl, Teaching → Faculty of Medicine). Instructors may assess students' preparation through either oral questioning or written quizzes. Students who are inadequately prepared may not receive credit for the

class and will be required to complete an individual make-up assignment in the form specified by the instructor before the next progress assessment.

5. On **two occasions per academic year**, students may attend classes with a teaching group other than their own. Students wishing to do so must obtain permission from the instructor in advance. Admission is subject to classroom capacity, and the instructor may refuse participation if no places are available.
6. If attendance with another group is not possible, or in the event of a **third absence** from classes with the student's assigned group, the student must contact their instructor by e-mail to arrange a written assignment as a substitute for the missed class.
7. All absences must be made up **by the end of the semester** in which they occurred.

C. CENTRAL PROGRESS ASSESSMENTS

1. Students register for each progress assessment during the designated teaching week via the University's online examination portal.
2. Any absence from a progress assessment must be justified within **three working days** following the final day of the assessment week.
3. In the case of a justified absence, the student will complete the assessment with the instructor responsible for their seminar/practical group. The format of the assessment will be determined individually. The resulting grade is treated as equivalent to the grade obtained in the centrally administered assessment.
4. An **unexcused absence** from a progress assessment is recorded as a **fail (grade 2.0)**.

D. FINAL EXAMINATION

Admission to the final examination requires:

1. Successful completion of **all compulsory classes** (Morning and Afternoon Practical Classes).
2. Passing **all progress assessments** and successfully completing the **Morning (Gross Pathology) Practical Classes**.
3. Attendance at **all lectures** and successful completion of the associated online quizzes.

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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



Laboratory Diagnostics

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	Department of Laboratory Diagnostics and Clinical Immunology of Developmental Age (1WW) 63a Żwirki i Wigury St., 02-091 Warsaw (Pediatric Hospital) Block 2H, second floor +48 22 3179511, 317 95 05 e-mail: zdl@wum.edu.pl
Head of Educational Unit / Heads of Educational Units	Prof. Urszula Demkow
Course coordinator	PhD Małgorzata Wachowska +48 22 317 95 05 e-mail: malgorzata.wachowska@wum.edu.pl

Person responsible for syllabus	Małgorzata Wachowska +48 22 317 95 05 e-mail: malgorzata.wachowska@wum.edu.pl
Teachers	PhD Małgorzata Wachowska, PhD Katarzyna Popko, PhD Aneta Manda-Handzlik, PhD Katarzyna Korniluk, Eliza Głodkowska-Mrówka, MSc Adrianna Cieloch

2. BASIC INFORMATION

Year and semester of studies	III year, 6 th semester (summer)	Number of ECTS credits	2.00
FORMS OF CLASSES		Number of hours	ECTS credits calculation
Contacting hours with academic teacher			
Lecture (L)		5	0,20
Seminar (S)		15	0,60
Classes (C)		25	1,00
e-learning (e-L)			
Practical classes (PC)			
Work placement (WP)			
Unassisted student's work			
Preparation for classes and completions		5	0,20

3. COURSE OBJECTIVES

O1	Present basic knowledge on the organization of clinical laboratory, application of laboratory tests as well as practical aspects of simple procedures and functional tests.
O2	Revise existing knowledge on the biochemistry and physiology of the main organ systems of the human body and help students to transfer theoretical knowledge into practical laboratory medicine setting.
O3	Familiarize students with: proper use of laboratory tests in clinical settings, including point-of-care testing; medical consequences of disease on the major organ systems reflected in lab test results;

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 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 29th of September 2023)
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Knowledge – Graduate* knows and understands:

E.W3 pkt. 4,5,6,7	environmental and epidemiological conditions, causes, symptoms, principles of diagnosis and therapeutic management of the most common childhood diseases and their complications: 4) anaemias, haemorrhagic diathesis, bone marrow failure states, childhood malignancies, including solid tumours typical of childhood, primary and secondary immunodeficiencies; 5) acute and chronic abdominal pain, vomiting, diarrhoea, constipation, gastrointestinal bleeding, peptic ulcer disease, inflammatory bowel disease, pancreatic disease, cholestasis, liver disease, food allergies, congenital abnormalities of the gastrointestinal tract; 6) acute kidney injury, chronic kidney disease, urinary tract infections, urinary tract disorders, congenital urinary tract abnormalities, vesicoureteral reflux disease, kidney stones, glomerular diseases, tubulointerstitial diseases (tubulopathies, tubular acidosis), genetically determined kidney diseases, renal hypertension; 7) failure to thrive, thyroid and parathyroid diseases, adrenal diseases, diabetes, obesity, pubertal disorders, gonadal disorders;
E.W7 pkt. 1,3,4,5,6,9	environmental and epidemiological conditions, causes, symptoms, principles of diagnosis and therapeutic management of the most common adult internal medicine diseases and their complications: 1) cardiovascular diseases, including ischaemic heart disease, heart defects, endocardial diseases, myocardium, pericardium, heart failure (acute and chronic), arterial and venous vascular diseases, hypertension (primary and secondary), pulmonary hypertension; 3) digestive system diseases, including oral diseases, oesophagus, stomach and duodenum, intestines, pancreas, liver, biliary tract and gallbladder, tumours of the digestive system; 4) endocrine system diseases, including diseases of the hypothalamus and pituitary, thyroid, parathyroid, adrenal cortex and medulla, ovaries and testes, and neuroendocrine tumours, polyglandular syndromes, different types of diabetes, metabolic syndrome, obesity, dyslipidaemia and hypoglycaemia, ovarian, testicular and thyroid tumours, neuroendocrine tumours; 5) kidney and urinary tract diseases, including acute kidney injury and chronic kidney disease in all stages and their complications, glomerular diseases (primary and secondary, including diabetic nephropathy and systemic diseases) and interstitial kidney diseases, renal hypertension, renal cysts, kidney stones, urinary tract infections (upper and lower), kidney diseases during pregnancy, urinary tract tumours - kidney cancer, bladder cancer, prostate cancer; 6) haematopoietic system diseases, including bone marrow aplasia, anaemia, granulocytopenia and agranulocytosis, thrombocytopenia, acute and chronic leukaemias, myeloma, myeloproliferative neoplasms, myelodysplastic syndromes, haemorrhagic diathesis, thrombophilia, blood disorders in diseases of other organs; 9) water-electrolyte and acid-base disorders (dehydration states, conductive states, electrolyte disturbances, acidosis and alkalosis);
E.W33 pkt.2	environmental and epidemiological conditions, causes, symptoms, principles of diagnosis and therapeutic and preventive management of the most common infectious diseases and their complications: 2) viral diseases, including respiratory and gastrointestinal infections, viral hepatitis, Herpesviridae, human immunodeficiency virus and neurotropic virus infections;
E.W39	types of biological materials used in laboratory diagnosis and the principles of collecting material for tests;
E.W40	possibilities and limitations of laboratory tests;

Skills– Graduate* is able to:

E.U9	recognize the most common symptoms of the disease in adults, use diagnostic tests and interpret their results, perform differential diagnosis, implement therapy, monitor the effects of treatment and assess indications for specialist consultation
E.U10	recognize the most common symptoms of the disease in children, apply diagnostic tests and interpret their results, conduct differential diagnosis, implement therapy, monitor the effects of treatment and assess indications for specialist consultation
E.U14 pkt. 7, 8, 15	perform medical procedures and treatments, including: 7) collecting and securing blood for laboratory tests, including microbiological ones; 8) collection of arterial blood and arterialized capillary blood; 15) strip tests, including measurement of glucose concentration using a glucometer;

* In appendix to the Regulation of Minister of Science and Higher education from 29th of September 2023 „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 term: norm, range of reference values
K2	the term: diagnostic sensitivity, diagnostic specificity, diagnostic accuracy.
K3	types and characteristics of biological material, rules and methodology of collecting, transporting, storing and preparing it for analysis
Skills– Graduate is able to:	
S1	determine the diagnostic usefulness of a laboratory test
S2	interpret ranges of reference values and assess the dynamics of changes in parameters laboratory
Social Competencies – Graduate is ready for:	
SC1	Team-work
SC2	prove the ability and habit of self-education

6. CLASSES		
Form of class	Class contents	Effects of Learning
Lecture	a) Interferences in laboratory tests b) Basic immunology laboratory techniques c) Body cavity and cerebrospinal fluids	E.W3, E.W7, E.W39, E.W40
Seminar	a) Laboratory to laboratory diagnostics of hematological disorders (1) b) Laboratory to laboratory diagnostics of hematological disorders (2) c) Serology of blood groups. Laboratory aspects of transfusion medicine. d) Hemostasis in health and disease e) Analysis of urine f) Laboratory diagnostic of kidney diseases g) Acid-base balance h) Introduction to clinical chemistry, proteins and cancer markers i) Laboratory diagnostics of liver and pancreatic diseases, and diabetes mellitus.	
Classes	a) Interpretation of laboratory tests and identification of causes deviations b) Analysis of urine and urine sediment c) Blood collection for analysis of ABB parameters c) Glucose measurement d) Laboratory diagnostic of coagulation disorders, INR determination e) Protein electropherogram analysis f) Hematology practical aspects h) Serology of blood groups	E.U9, E.U10, E.U14, E.W40

7. LITERATURE

Obligatory

1. Clinical Chemistry, Bishop M., Fody E., Schoeff L., 2009, Wolters Kluwer
2. Laboratory Medicine: The Diagnosis of Disease in the Clinical Laboratory 2. edition, Laposata M., 2014, Mc Grow Hill Medical.

Supplementary

8. VERIFYING THE EFFECT OF LEARNING

Code of the course effect of learning	Ways of verifying the effect of learning	Completion criterion
E.W3 pkt. 4,5,6,7 E.W7 pkt. 1,3,4,5,6,9 E.W33 pkt.2 E.W39 E.W40 E.U9 E.U10 E.U14	Presence at <u>all seminars and all practical classes</u> . Colloquiums from seminars consists of open-ended questions and/or single-choice and multiple-choice questions. The assessment will take place in a computer rooms. The results will be announced within a maximum of 7 working days and published in the BAZUS system. Students who fail the colloquium test are allowed to have 2 retakes. The retakes are scheduled individually.	100% presence passing grade is 60%
	Admission to the final examination requires successful completion of the credit test. The final theoretical examination consists of single-choice and multiple-choice questions and/or open-ended questions including interpretation of diagnostic results. The exam will take place in a computer rooms.	threshold number of points (45/75 points), passing grade is 60%

9. ADDITIONAL INFORMATION

IMPORTANT! This subject is part of the material covered in the Objective Structured Clinical Examination (OSCE) to be held in the fourth year of study. Detailed information regarding the exam: www.osce.wum.edu.pl/wl

1. Due to the limited number of places available during practical classes at the Department, changing assigned dean's groups is not possible. Students may only exchange places with another student from a different dean's group. There is no possibility to make up seminars or practical classes.
2. Students must read the Department's internal regulations available at www.zdl.wum.edu.pl. The schedule of seminars and practical classes are also available there.
3. Attendance at all classes during the course is mandatory. Students are required to arrive on time and be present at the scheduled start of each class. Late arrival result in the student being recorded as absent. To avoid disruption once the class has started entry to the classroom may not be possible.
Any problems affecting a student's ability to attend the scheduled classes should be reported to the Course Coordinator before the start of the course seminar or practical part.
4. Practical part. During practical part student are obligated to wear labcoats and have shoes changed. All outer garments should be left in the student's cloakroom (hospital, -1 floor). Students are obligated to prepare for practical classes
5. Course assessment. The assessment is held on a pre-arranged date agreed with the Dean's Office or the person responsible for scheduling and cannot be rescheduled at an individual student's request. It takes place in the computer room and consists of open-ended and/or single-choice and multiple-choice questions.
A minimum score of 60% is required to pass.

The following grading scale applies:

Grade	Number of points/%
2	<60%

3	60–67%
3,5	68–75%
4	76–83%
4,5	84–91%
5	92–100%

The assessment thresholds are fixed and are not subject to individual adjustment. Requests for a reduction of the pass threshold will not be considered.

Students who fail the assessment are entitled to two resit attempts. Resit dates are arranged separately with each student group. In the case of an excused absence, the student must contact the Course Coordinator within 3 working days.

6. Requirements for admission to the final examination. To be admitted to the final examination, students are required to:
 - pass the course assessment;
 - full attendance at all scheduled classes;
7. Final examination. The final examination consists of 75 closed-ended questions and is conducted electronically. The examination date will be published on the Department's website. Students must read the Regulations for Electronic Examinations at the Medical University of Warsaw. In the case of an excused absence, the student retains the right to take the examination as a first attempt. The Course Coordinator must be informed within 3 working days. Students who fail the exam at first term are allowed to retake it during autumn exam session. Students who fail the second term can have a commission exam. The format of the second and third examination attempts may consist of closed-ended and/or open-ended questions and may be conducted electronically in written or oral form.

The following grading scale applies:

Grade	Number of points/%
2	<45 (<60%)
3	45–50 (60–67%)
3,5	51–56 (68–75%)
4	57–62 (76–83%)
4,5	63–68 (84–91%)
5	69–75 (92–100%)

The assessment thresholds are fixed and are not subject to individual adjustment. Requests for a reduction of the pass threshold will not be considered.

8. Final course grade. Final course grade is awarded only after the student has passed the final examination with a grade of at least **3.0**. The final grade is calculated as a weighted average of:

-course assessment grade – 30%

-final examination grade – 70%

If the course assessment is taken more than once (maximum three attempts: the first attempt and two retakes), the course assessment grade is calculated as the arithmetic mean of all attempts.

Weighted average	Final course grade
up to 3.49	3.0
3.50–3.99	3.5
4.00–4.49	4.0
4.50–4.99	4.5
5.00	5.0

9. Any concerns should be addressed to the Course Coordinator by email, during designated consultation hours, or at an appointment arranged by email. Emails are answered during working hours only.

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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.



Pharmacology and Toxicology

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/ Exam
Educational Unit / Educational Units	Chair and Department of Experimental and Clinical Pharmacology Centre for Preclinical Research and Technology CePT, Banacha 1b, 02-927 Warsaw, tel. (+48) 22 116 61 60
Head of Educational Unit / Heads of Educational Units	Prof. Dagmara Mirowska-Guzel MD, PhD, SciD tel. (+48) 022 1166160
Course coordinator	Maciej Niewada MD, PhD, SciD tel. (+48) 691745377
Person responsible for syllabus	Maciej Niewada MD, PhD, SciD tel. (+48) 691745377
Teachers	Jan Bembenek MD, PhD, SciD Iwona Korzeniewska-Rybicka MD, PhD Marcin Granat, MSc Pharm Wojciech Masełbas MD, PhD Maciej Niewada MD, PhD, SciD Ceren Postula, MSc, PhD, SciD Justyna Pyrzanowska MD, PhD, SciD Hasan Swaroop, MD Ewa Widy-Tyszkiewicz MD, PhD, SciD Aleksandra Wiśłowska-Stanek MD, PhD, SciD

2. BASIC INFORMATION			
Year and semester of studies	Year 3, Semesters 5 and 6 (winter and summer)	Number of ECTS credits	9.00
FORMS OF CLASSES	Number of hours	ECTS credits calculation	
Contacting hours with academic teacher			
Lecture (L)	30	1,2	
Seminar (S)	10	0,4	
Classes (C)	60	2,4	
e-learning (e-L)			
Practical classes (PC)			
Work placement (WP)			
Unassisted student's work			
Preparation for classes and completions	125	5	

3. COURSE OBJECTIVES	
O1	Concepts and principles of mechanism of action, clinical applications and adverse effects of drugs.
O2	Translation of pharmacological principles into clinical decision-making.
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: <i>(in accordance with appendix to the Regulation of Minister of Science and Higher education from 29th of September 2023)</i>
Knowledge – Graduate* knows and understands:	
C.W28	the different groups of medicinal products, their mechanisms and effects of action, their basic indications and contraindications and their basic pharmacokinetic and pharmacodynamic parameters;
C.W29	physiological and pathological determinants of drug absorption, metabolism and elimination by the human body;
C.W30	basic principles of pharmacotherapy, taking into account its efficacy and safety, the need for individualisation of treatment, including that resulting from pharmacogenetics;

C.W31	major adverse drug effects, interactions and the problem of poly-pragmasy;
C.W32	the problem of drug resistance, including multidrug resistance, and the principles of rational antibiotic therapy;
C.W33	options and types of biological, cellular, gene and targeted therapies for specific diseases;
C.W34	basic concepts of general toxicology;
C.W35	groups of drugs whose abuse can lead to poisoning;
C.W36	symptoms of the most common acute poisonings with selected groups of drugs, alcohol and other psychoactive substances, fungi and heavy metals;
C.W37	basic principles of diagnostic and therapeutic management of poisoning;

Skills– Graduate* is able to:

C.U8	perform simple pharmacokinetic calculations;
C.U10	design rational chemotherapy regimens for infections - empirical and targeted;
C.U11	prepare prescription formulation records of selected medicinal substances and issue prescriptions, including e-prescriptions, in accordance with legislation;
C.U12	seek reliable information on medicinal products, with particular reference to the summary of product characteristics (SmPC) and databases;

* In appendix to the Regulation of Minister of Science and Higher education from 29th of September 2023 „graduate”, not student is mentioned.

5. ADDITIONAL EFFECTS OF LEARNING (non-compulsory)

Number of effect of learning	Effects in the fields of:
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Knowledge – Graduate knows and understands:

K1	
----	--

Skills– Graduate is able to:

S1	
----	--

Social Competencies – Graduate is ready for:

SC1	
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6. CLASSES

Form of class	Class contents	Effects of Learning
Seminars and classes:	1. Pharmacokinetics I. 2. Pharmacokinetics II. 3. Chemotherapeutic agents I. 4. Chemotherapeutic agents. II. 5. Chemotherapeutic agents III.	C.W28, C.W29, C.W30, C.W31, C.W32, C.W33, C.W34, C.W35, C.W36, C.W37, C.U8, C.U10, C.U11

	6. Anthelmintic drugs. Antiprotozoal drugs. Antifungal drugs. 7. Drugs used in gastrointestinal diseases. Control of gastric acidity and treatment of peptic ulcers. Emetic drugs and antiemetic drugs. Drugs which increase gastro-intestinal motility. Antidiarrheal drugs. 8. Agents used in disorders of coagulation. 9. Adrenocorticosteroids and adrenocortical antagonists. The hypothalamic and pituitary hormones. Sex hormones – estrogens, progestins, androgens. 10. Pancreatic hormones and antidiabetic drugs. Thyroid and antithyroid drugs. 11. Prescription writing. 12. Drugs used in respiratory diseases. 13. CV drugs 1. Catecholamines and sympathomimetic drugs. Adrenergic receptor antagonists. 14. CV drugs 2. Calcium channel blockers. Diuretic agents. 15. CV drugs 3. Drugs affecting RAAS. Other vascular drugs. 16. Lipid lowering agents. Drugs in treatment of obesity. 17. Opioid analgesics and antagonists. 18. Nonsteroidal anti-inflammatory drugs and non-opioids analgesics. 19. Psychostimulants. Anxiolytics. 20. Antipsychotic agents. 21. Antidepressant agents. 22. Drugs used in neurological disorders.	
Lectures	1. Introduction to pharmacology. Basic principles. Reliable sources of information in pharmacology. 2. Pharmacodynamics: drug action, the relationship between drug concentration and effect. 3. Antiviral drugs. 4. Drug prevention of infectious diseases. 5. Drugs used in chemotherapy of tuberculosis and leprosy. 6. Rational use of chemotherapeutics. 7. Agents that affect bone mineral homeostasis. Drugs used in rheumatology. 8. Agents used in cytopenias. Hematopoietic growth factors. 9. Agents acting at the neuromuscular junction and autonomic ganglia. Cholinergic agonists. Cholinergic blocking drugs. 10. Mediators of inflammation and allergy. Anti-allergic drugs. Immunopharmacology. 11. Cancer drugs. 12. Local and general anaesthetics. 13. Antihypertensive agents. 14. Drugs used in angina pectoris. 15. Agents used in cardiac arrhythmias. 16. Drugs used in ophthalmology. 17. Dermatologic pharmacology. 18. Pharmacology of alcohol consumption. 19. Drugs of abuse. 20. Principles of toxicology. Harmful effects of drugs. 21. Occupational and environmental toxicology. - Agents used in anaemias. Pharmacology of vitamins.	C.W28, C.W29, C.W30, C.W31, C.W32, C.W33, C.W34, C.W35, C.W36, C.W37, C.U8, C.U10, C.U11

7. LITERATURE

Obligatory

1. James M. Ritter, Rod J. Flower, Graeme Henderson, Yoon Kong Loke, David MacEwan, Emma Robinson, James Fullerton. Rang & Dale's Pharmacology, 10th Edition. Elsevier, 2023.
2. Todd W. Vanderah (ed.). Katzung's Basic and Clinical Pharmacology, 16th Edition. McGraw Hill, 2023.
3. Marieke Kruidering-Hall, Bertram G. Katzung, Rupa Lalchandani Tuan, Todd W. Vanderah, Anthony J. Trevor. Katzung & Trevor's Pharmacology Examination and Board Review, McGraw Hill Education, 14th Edition, 2024.
4. Goodman and Gilman's The Pharmacological Basis of Therapeutics. Laurence Brunton, Bjorn Knollman, Randa Hilal-Dandan, McGraw-Hill Education, 14th Edition. 2022.

Supplementary

1. Paweł Krząćcik, Przemysław Mikołajczak. Pharmacology in a nutshell. 2017. 1st Edition. ISBN: 978-83-941043-2-0
2. Lippincott Illustrated Reviews: Pharmacology, 8th edition, Karen Whalen PharmD, BCPS, Publication Date October 2, 2022
3. BRS Pharmacology, Author: Sarah Lerchenfeldt, 8th edition, publication date: May 29, 2025

8. VERIFYING THE EFFECT OF LEARNING

Code of the course effect of learning	Ways of verifying the effect of learning	Completion criterion
C.W28, C.W29, C.W30, C.W31, C.W32, C.W33, C.W34, C.W35, C.W36, C.W37, C.U8, C.U10, C.U11	Attendance Multiple choice tests or oral credits	All seminars and classes <i>Grade and criteria:</i> 2,0 (unsatisfactory) ≤ 50% 3,0 (satisfactory) 51-58% 3,5 (fairly good) 59-68% 4,0 (good) 69-78% 4,5 (above good) 79-88% 5,0 (very good) ≥ 89%

9. ADDITIONAL INFORMATION

Students are communicated and updated via TEAMS platform.

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

After both V and VI semesters students are obliged to complete the final credits in form of MCQ or oral colloquium that covers the scope of classes, seminars and lectures. Both intermediate credits, after semester V and after semester VI, are conducted as electronic MCQ tests. The oral form is used for retakes when only a small number of students are taking the test. Each semester credit may be taken in three terms: the first term and two retake terms. A commission credit is not an additional term - it is extraordinary in character and may be granted by the Dean only where justified objections are raised as to the conduct of the credit. Both semester credits must be obtained before the start of the summer examination session, which is the final deadline for completing the credits for this course.

Passing both semester credits is required for admission to the final exam. The final exam covers the whole scope of pharmacology and toxicology and is held during the summer examination session at the end of the academic year. Students are entitled to three exam terms: the first term and two retake terms. Retake terms are held in the nearest retake session or, with the Dean's consent, on another date, and all terms must be completed by the end of the academic year.

Absences at classes, seminars, credits and exams are excused as follows. The student notifies the course coordinator by e-mail or in writing no later than three working days after the day on which the class, credit or exam took place; a medical certificate is delivered to the course coordinator within seven working days from the date of issue. Where a medical certificate covers a period in which the student attended some classes, credits or exams and missed others, all absences in that period are treated as unexcused. An excused

absence at a credit term entitles the student to one additional term. Where missed classes can be made up, the way and the date of doing so are determined by the Head of the Educational Unit.

Rules on colloquiums and Q&A tests

1. Students are informed about the date/time and the venue for MCQ tests either for semester colloquium or final exam at least one month in advance.
2. Students are expected to arrive at the venue at least 15 minutes before test start. Those who are late more than 15 minutes after the test start are not allowed to enter and are kindly invited for the retake.
3. To facilitate student identification a student ID card, or another photo identity document, needs to be presented, otherwise students are not allowed to take the test.
4. Students are asked to wait outside the room and can enter only following identification confirmed.
5. Students are allocated the individual place which is pointed by supervisor.
6. **The test is based on student individual work - unauthorized materials (including revision notes and electronic devices including mobile phones) are disallowed. Communication with any person during the exam, other than the supervisor, is prohibited. Where non-independent work or the use of unauthorized materials or devices is established, the student receives an unsatisfactory grade and may take the retake term only with the Dean's consent; the conduct may also be referred for disciplinary proceedings.**
7. For MCQ tests only one answer is correct.
8. To pass the test students need to provide 50% + 1 (i.e. 51 for 100 questions) correct answers. The final individual score is based on the number of correct answers provided and other students' performance (the distribution of test results).
9. The form of retake is usually the same as first approach unless number of students for retake determines the feasible form which then is individually decided.

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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



Polish For Medicine – Communication Skills In 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
Type of module / course	obligatory
Form of verification of learning outcomes	exam
Educational Unit / Educational Units	Foreign Language Department The Didactic Center, ul. Trojdena 2a, 02-109 Warsaw e-mail: sjosekretariat@wum.edu.pl , tel. 22 5720863 www.sjo.wum.edu.pl/
Head of Educational Unit / Heads of Educational Units	Maciej Ganczar, PhD Professor at MUW, e-mail: maciej.ganczar@wum.edu.pl
Course coordinator	Anna Maczkowska, MA e-mail: anna.maczowska@wum.edu.pl
Person responsible for syllabus	Anna Maczkowska, MA e-mail: anna.maczowska@wum.edu.pl
Teachers	Anna Maczkowska, MA

2. BASIC INFORMATION

Year and semester of studies	3 rd , 1 st and 2 nd semester	Number of ECTS credits	3.00
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FORMS OF CLASSES	Number of hours	ECTS credits calculation
Contacting hours with academic teacher		
Lecture (L)		
Seminar (S)		
Classes (C)	60	2,40
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	The third year Polish language course is designed to improve the students' command of the medical language skills and practise history taking and giving instructions to the patient in definite clinical situations.
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4. STANDARDS OF LEARNING – DETAILED DESCRIPTION OF EFFECTS OF LEARNING

Code and number of the effect of learning in accordance with standards of learning	Effects in the field of: <i>(in accordance with appendix to the Regulation of Minister of Science and Higher education from 29th of September 2023)</i>
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Knowledge – Graduate* knows and understands:

D.W7	the specificity and role of verbal (conscious message construction) and non-verbal communication (e.g. facial expressions, gestures, management of silence and space);
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Skills– Graduate* is able to:

D.U5	critically analyse medical literature, including literature in English, and draw conclusions
D.U6	communicate with the patient in one of the foreign languages at B2+ level of the Common European Framework of Reference for Languages
D.U11	adapt verbal communication to the needs of the patient, expressing themselves clearly and avoiding medical jargon;

* In appendix to the Regulation of Minister of Science and Higher education from 29th of September 2023 „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 names of the most common diseases and their symptoms in Polish language
K2	
Skills– Graduate is able to:	
S1	conduct a basic bedside conversation and a more detailed conversation with patients affected by the diseases discussed during the 3 rd year Polish language course (i.e. ask and answer questions during the medical interview (pertaining to personal history, history of the presenting complaint, past history, family history, drug history, social history, systemic inquiry))
S2	give instructions for the clinical examination of adult and paediatric patients and explain the doctor's intentions
S3	inform the patient as to what diagnostic investigations need to be done.
Social Competencies – Graduate is ready for:	
SC1	continually broadening their knowledge

6. CLASSES

Form of class	Class contents	Effects of Learning
C1/2	Discussing the syllabus (the course content, learning outcomes and the methods of their verification; rules and regulations; credit receiving criteria). Instructions for the clinical examination of adults and children (revision) • Explaining the doctor's intentions to the patient (revision) • The medical interview: personal history, chief complaint, past history, family history, drug history, social history, systemic inquiry (revision)	D.U6, D.W7, K1 S1, S2, S3
C 3/4	Diseases of the cardiovascular system: symptoms and signs • Diagnostic investigations • The <i>trzeba/można</i> + infinitive construction; the doctor's questions and the patient's answers pertaining to the diseases of the cardiovascular system • Pain: location, radiation, onset (timing, setting), previous similar pain, duration, character, severity, aggravating and relieving factors, associated symptoms • Physical examination	D.U6, D.W7, K1 S1, S2, S3
C 5	Ischaemic heart disease and myocardial infarction: taking history / physical examination (dialogues)	D.U6, D.W7, K1 S1, S2, S3
C 6	Hypertension: taking a history / physical examination (dialogues) /Revision (diseases of the cardiovascular system)	D.U6, D.W7, K1 S1, S2, S3
C 7/8	• Diseases of the respiratory system: symptoms and signs • case taking: the doctor's questions and the patient's answers pertaining to the	D.U6, D.W7, K1 S1, S2, S3

	diseases of the respiratory system • Diagnostic investigations • Physical examination Pneumonia: taking a history / physical examination (dialogues)	
C 9/10	Asthma: taking a history / physical examination (dialogues) Revision (diseases of the respiratory system. Intermediate test 1	D.U6, D.W7, K1 S1, S2, S3
C 11/12	Diseases of the digestive system: symptoms and signs • doctor's questions and the patient's answers pertaining to the diseases of the digestive system • Diagnostic investigations • Physical examination Peptic ulcers: taking a history / physical examination (dialogues)	D.U6, D.W7, K1 S1, S2, S3
C 13/14	Cholelithiasis: taking a history / physical examination (dialogues) Appendicitis: case description.	D.U6, D.W7, K1 S1, S2, S3
C 15	Revision: diseases of the digestive system. Intermediate test 2.	D.U6, D.W7, K1 S1, S2, S3
C 16/17	Diseases of the urinary system: symptoms and signs • doctor's questions and the patient's answers pertaining to the diseases of the urinary system • Diagnostic investigations • Physical examination Nephrolithiasis: taking a history / physical examination (dialogues)	D.U6, D.W7, K1 S1, S2, S3
C 18/19	Cystitis: taking history / physical examination (dialogues) Revision (diseases of the urinary system) • Diseases of the male reproductive system: symptoms and signs • doctor's questions and the patient's answers pertaining to the diseases of the reproductive system • Diagnostic investigations • Physical examination	D.U6, D.W7, K1 S1, S2, S3
C 20/21	Benign prostatic hyperplasia: taking a history / physical examination (dialogues). Intermediate test 3.	D.U6, D.W7, K1 S1, S2, S3
C 22/23	The female reproductive system: symptoms and signs • doctor's questions and the patient's answers pertaining to the diseases of the reproductive system. Breast cancer and endometrial hyperplasia: taking a history / physical examination (dialogues)	D.U6, D.W7, K1 S1, S2, S3
C 24/25	Diseases of the nervous system: symptoms and signs • The medical interview: the doctor's questions and the patient's answers pertaining to the diseases of the nervous system • Diagnostic investigations • Physical examination	D.U6, D.W7, K1 S1, S2, S3
C 26/27	Stroke: taking a history / physical examination (dialogues). Diseases of the nervous system: revision.	D.U6, D.W7, K1 S1, S2, S3
C 28/29	Diseases of the locomotor system: symptoms and signs • doctor's questions and the patient's answers pertaining to the diseases of the locomotor system. Fracture of the neck of the femur: taking a history / physical examination (dialogue). General revision	D.U6, D.W7, K1 S1, S2, S3
C 30	Intermediate test 4	D.U6, D.W7, K1 S1, S2, S3

7. LITERATURE

Obligatory

Maria Janowska, Świetlana Sikorska "Proszę oddychać! Część III, Warszawski Uniwersytet Medyczny
Handouts prepared by the teachers

Supplementary		
8. VERIFYING THE EFFECT OF LEARNING		
Code of the course effect of learning	Ways of verifying the effect of learning	Completion criterion
D.U6	Written exam. Oral exam.	To successfully complete the Polish language course, a student needs to obtain credit for the 3rd year coursework and pass the final examination covering the 1st, 2nd, and 3rd year coursework. To obtain credit for the 3rd year Polish language course, a student is required to: • attend all classes (min. 13 out of 15 in a semester) A student who misses more than 2 classes per semester without a valid excuse will not receive course credits and will not be allowed to sit the course final exam (unless the absence was due to long-term illness confirmed by doctor's note and medical documentation and the student received a permission to obtain the credit from the Head of the Centre for Foreign Languages). The only valid excuse for absence is illness. Absences due to illness will be excused on presentation of a valid medical note. To justify an absence from classes, tests, or exams, the student is required to notify the course instructor by email or in writing no later than three working days after the date on which the class, test, or exam took place. The student is obliged to make up for each absence (excused or unexcused) by performing a special written/oral task assigned by the teacher OR by attending a class with another group (on teacher's permission). The student is obliged to make up for the absence not later than within a week after the absence has occurred. If a student misses a class, she/he must catch up on the missed material. It is the student's responsibility to communicate with the class teacher as soon as possible about any attendance issues. • come to classes punctually If a student arrives less than 15 minutes late three times per semester, it will count as one absence. Arriving to class more than 15 minutes late is counted as an absence. • actively participate in each class • complete all the assignments by the due date • pass the progress tests during the 1st and the 2nd semester (2 written progress tests per semester). A student who misses a scheduled test will receive a score of 0 (which equals failing) unless she/he notifies the class teacher of the reason for her/his failure to take the test within three days of the scheduled test date and makes up the missed test if the reason is justified at the date set by the class teacher. A student who fails the course tests may attempt two retakes. A student who fails any of the progress tests at the third attempt needs to repeat the course.

	After obtaining the credit for the 3rd year coursework, a student is eligible to take the final examination, consisting of a written and oral part, in the summer examination session. A minimum score of 60% must be received for each part to pass the examination. The final examination grade is the average (arithmetic mean) of the two (written and oral) examination grades (percentage scores) or a grade of 3 for passing a retake. The student who fails the exam may attempt two retakes. The retakes have the same format as the original exam. If the student fails one part of the exam (only the written or only the oral part), they retake only the part they have failed. The dates of the final written and oral parts of the examination are set by the Course Coordinator and the Dean's Office. The document 'Rules of Studies of the Medical University of Warsaw' describes the examination rules and procedures which will apply to the Polish final examination. The scale of grades is as follows: <table><tr><td>2.0 (failed)</td><td>Below 60%</td></tr><tr><td>3.0 (satisfactory)</td><td>60-69%</td></tr><tr><td>3.5 (rather good)</td><td>70-79%</td></tr><tr><td>4.0 (good)</td><td>80-85%</td></tr><tr><td>4.5 (more than good)</td><td>86-90%</td></tr><tr><td>5.0 (very good)</td><td>91-100%</td></tr></table>	2.0 (failed)	Below 60%	3.0 (satisfactory)	60-69%	3.5 (rather good)	70-79%	4.0 (good)	80-85%	4.5 (more than good)	86-90%	5.0 (very good)	91-100%
2.0 (failed)	Below 60%												
3.0 (satisfactory)	60-69%												
3.5 (rather good)	70-79%												
4.0 (good)	80-85%												
4.5 (more than good)	86-90%												
5.0 (very good)	91-100%												

9. ADDITIONAL INFORMATION

All detailed information about the course completion criteria and rules are listed in the Rules and Regulations of the Centre for Foreign Languages <https://sjo.wum.edu.pl/rules-and-regulations-centre-foreign-languages-2>

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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.



Radiology (Diagnostic Imaging)

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	Diagnostic Ultrasound Lab Department of Pediatric Radiology (WLS18A) Mazowiecki Bródnowski Hospital, 8 Kondratowicza Street; phone 48 22 326 58 10 e-mail: zdo@wum.edu.pl
Head of Educational Unit / Heads of Educational Units	Assoc. Prof. Bartosz Migda MD, PhD e-mail: bartosz.migda@wum.edu.pl
Course coordinator	Assoc. Prof. Bartosz Migda MD, PhD e-mail: bartosz.migda@wum.edu.pl
Person responsible for syllabus	Assoc. Prof. Bartosz Migda MD, PhD e-mail: bartosz.migda@wum.edu.pl
Teachers	Assoc. Prof. Bartosz Migda MD, PhD; Assoc. Prof. Ewa Białek, Dr Dominik Nguyen, Dr Remigiusz Krysiak, Dr Michał Kutylowski, Dr Mateusz Kryczka, Dr Grzegorz Bienia, Dr Katarzyna Prostacka, Dr Marcin Witek

2. BASIC INFORMATION

Year and semester of studies	Year 3, 5th Semester (winter)	Number of ECTS credits	2.00
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FORMS OF CLASSES	Number of hours	ECTS credits calculation
Contacting hours with academic teacher		
Lecture (L)	10	0.40
Seminar (S)	6	0.20
Classes (C)	24	1.00
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	To acquaint students with conventional X-ray and ultrasound examinations.
O2	To acquaint students with modern advanced Imaging Techniques MR, CT.
O3	To teach students the Basic skill to perform ultrasound which is the stethoscope of modern doctor.

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

Code and number of the effect of learning in accordance with standards of learning	Effects in the field of: <i>(in accordance with appendix to the Regulation of Minister of Science and Higher education from 29th of September 2023)</i>
Knowledge – Graduate* knows and understands:	
B.W7	the physical basis of non-invasive imaging methods;
F.W17 pkt. 1, 2, 3	issues of currently used imaging tests, in particular: 1) radiological symptomatology of basic diseases; 2) instrumental methods and imaging techniques used to perform medical procedures; 3) indications, contraindications and patient preparation for particular types of imaging tests and contraindications to the use of contrast agents;
Skills– Graduate* is able to:	
F.U4	recognize the most common life-threatening conditions, with use of various imaging techniques;
F.U5	recognize the most common types of fractures, especially long bones, based on radiological examination;

* In appendix to the Regulation of Minister of Science and Higher education from 29th of September 2023 „graduate”, not student is mentioned.

5. ADDITIONAL EFFECTS OF LEARNING (<i>non-compulsory</i>)	
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	to establish and maintain a meaningful and respectful relationship with the patient, while demonstrating understanding of differences in beliefs, values, and cultural backgrounds.
SC2	kierowania się dobrem pacjenta
SC3	to maintain medical confidentiality and respect patients' rights.
SC4	to recognize and acknowledge one's own limitations and to self-assess knowledge gaps and educational needs.
SC5	to use objective and reliable sources of information.
SC6	to draw conclusions from one's own measurements or observations.
SC7	to apply the principles of professional collegiality and teamwork, including collaboration with other healthcare professionals, also in multicultural and multinational environments.
SC8	to formulate opinions on various aspects of professional practice.
SC9	to assume responsibility for decisions made in professional practice, including with regard to the safety of oneself and others.

6. CLASSES		
Form of class	Class contents	Effects of Learning
LECTURES	1. Introduction to oncological imaging workup – selected issues 2. Imaging of Patients from the ED – Selected Issues 3. Emergencies in the CNS – A Practical Approach to Typical and Atypical Cases 4. Neck Ultrasound – Selected Issues 5. Genitourinary Tract	B.W7, F.W17 pkt. 1, 2, 3, F.U4, F.U5, SC1-9
Seminars & Classes	Introduction to Medical Imaging; Hazards and precautions in medical imaging (contrast media, radiation hazards, MRI issues) Radiological Anatomy (abdominal cavity in CT, MRI). Pathologies in abdominal cavity in CT, MRI Gastrointestinal tract; acute abdomen, abdominal cavity in US (anatomy and pathology); emergencies in GI tract How to read chest X-ray; diagnostic of the chest; emergencies in the chest Introduction, basic, demonstration of US exam (abdomen) and cases in CT, MRI	B.W7, F.W17 pkt. 1, 2, 3, F.U4, F.U5, SC1-9

7. LITERATURE

Obligatory

Core Radiology Second Edition; Ellen X. Sunm Junzi Shi, Jacob C. Mandell,

Supplementary

Gibson R, et al.: Essential Medical Imaging. Cambridge University Press, 2009.

Brant William E., Helms Clyde A.; Fundamentals of diagnostic radiology; Lippincott Williams & Wilkins, 2006.

8. VERIFYING THE EFFECT OF LEARNING

Code of the course effect of learning	Ways of verifying the effect of learning	Completion criterion
B.W7, F.W17 pkt. 1, 2, 3, F.U4, F.U5, K1-K9	Assessment criteria: * attendance at classes; * active participation in classes; * observation of the student during classes by the instructor; * assessment of the student's skills and competencies by the instructor; * multiple-choice test (20 questions = 20 points).	* Positive assessment by the instructors – satisfactory acquisition of the required skills and ability to apply the competencies described above. * Course completion requirement: multiple-choice test: a minimum of 60% correct answers. * In the event of absence, the student is required to make up the missed classes and pass a resit test (up to two attempts), following prior arrangement with the Secretariat.

9. ADDITIONAL INFORMATION

Details regarding the course organization and contact information are available at: diagnostykaobrazowa.wum.edu.pl/english-division

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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



ONCOGENETICS

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 Tumor Biology and Genetics Medical University of Warsaw Pawińskiego 7 02-106 Warsaw, Poland Email: onkogenetyka@wum.edu.pl Phone: (4822) 599-1670
Head of Educational Unit / Heads of Educational Units	Prof. Tomasz Stokłosa, MD, PhD, tomasz.stoklosa@wum.edu.pl
Course coordinator	Grzegorz Placha, MD, PhD, grzegorz.placha@wum.edu.pl
Person responsible for syllabus	Grzegorz Placha, MD, PhD, grzegorz.placha@wum.edu.pl
Teachers	Prof. Tomasz Stokłosa, MD, PhD, tomasz.stoklosa@wum.edu.pl Grzegorz Placha, MD, PhD, grzegorz.placha@wum.edu.pl Marcin Machnicki, PhD, mmachnicki@wum.edu.pl Anna Pastwińska, PhD, anna.pastwinska@wum.edu.pl Monika Kolanowska, PhD, monika.kolanowska@wum.edu.pl

2. BASIC INFORMATION			
Year and semester of studies	Year 3, Semester 5 (winter)	Number of ECTS credits	1.00
FORMS OF CLASSES	Number of hours	ECTS credits calculation	
Contacting hours with academic teacher			
Lecture (L)			
Seminar (S)	3 (including 1 hour of seminar provided in e-learning)	0,1	
Classes (C)	12	0,6	
e-learning (e-L)			
Practical classes (PC)			
Work placement (WP)			
Unassisted student's work			
Preparation for classes and completions	9	0,3	

3. COURSE OBJECTIVES	
O1	Acquisition of knowledge about the importance of genetic testing in modern oncology, with particular emphasis on the use of the latest technologies (such as next-generation high-throughput sequencing – NGS) in the prevention, classification and molecularly targeted therapy of cancer.
O2	Develop skills in interpreting the results of genetic and cytogenetic tests performed in oncology and hemato-oncology.
O3	Gain competence in selecting appropriate molecular techniques and determining the scope of genetic testing across diverse clinical scenarios.

4. STANDARDS OF LEARNING – DETAILED DESCRIPTION OF EFFECTS OF LEARNING	
Code and number of the effect of learning in accordance with standards of learning	Effects in the field of: <i>(in accordance with appendix to the Regulation of Minister of Science and Higher education from 29th of September 2023)</i>
Knowledge – Graduate* knows and understands:	
C.W2	genetic causes of hereditary predisposition to cancer;

C.W5	genetic determinants of the most common single-gene, polygenic and multifactorial diseases, basic chromosome aberration syndromes, syndromes caused by genomic rearrangements, polymorphisms, epigenetic and post-transcriptional changes;
C.W8	genetic diagnostic methods and the basic indications for their use;
C.W9	genetic mechanisms of drug resistance acquisition by microorganisms and cancer cells and their relationship to the need for individualisation of pharmacotherapy;
C.W26	pathogenesis of diseases, including genetic and environmental conditions;
C.W42	molecular basis of cancer and issues in cancer immunology;
C.W43	practical elements of molecular biology and immunology used in the diagnosis and therapy of oncological diseases
E.W24.3	oncology issues, including: 3) basics of early cancer detection, principles of screening and preventive measures in oncology;

Skills– Graduate* is able to:

B.U8	use medical databases and correctly interpret the information they contain to solve problems in basic and clinical sciences;
C.U2	make decisions on the need for cytogenetic and molecular tests;
C.U3	read basic genetic test results, including karyotypes;
C.U4	determine genetic risk based on bloodline and genetic test result for chromosomal aberrations, genomic rearrangements, single-gene and multifactorial diseases;

* In appendix to the Regulation of Minister of Science and Higher education from 29th of September 2023 „graduate”, not student is mentioned.

5. ADDITIONAL EFFECTS OF LEARNING (non-compulsory)

Number of effect of learning	Effects in the fields of:
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Knowledge – Graduate knows and understands:

K1	
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Skills– Graduate is able to:

S1	relate images of tissue and organ damage to clinical signs of disease, history and laboratory findings to establish a diagnosis in the most common diseases of adults and children (C.U7);
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Social Competencies – Graduate is ready for:

SC1	
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6. CLASSES

Form of class	Class contents	Effects of Learning
Seminar	Seminar 1 (e-learning platform) self-completed before the course - <u>Introduction to oncogenetics.</u>	C.W2, C.W5, C.W8, C.W9, C.W42, C.W43, C.U3

	Carcinogenesis, oncogenes and suppressor genes. Types and examples of genetic aberrations in tumors and their nomenclature. Principles of classification of pathogenicity of genetic variants and determination of their clinical significance.	
Seminar	Seminar 2 - <u>Recent genetic technologies and their implementation in routine clinical practice: an introduction to precision medicine as demonstrated in oncology.</u> The most important advances in cancer genetic research over the past decade. Introduction and clarification of key concepts such as personalized oncology, precision oncology, actionable mutations, tumor profiling, and tumor mutational burden. Overview of genetic methods, from single-gene testing to multigene next-generation sequencing (NGS) in oncology, including their respective advantages and limitations. Examples of biomarkers essential for targeted therapy and the application of NGS-based genetic testing in selected solid and hematopoietic malignancies.	C.W2, C.W5, C.W8, C.W9, C.W26, C.W42, C.W43, C.U2, C.U4
Classes	Exercise 1 – <u>Diagnosis of hematologic malignancies based on cytogenetic and molecular techniques.</u> Molecular biology and cytogenetic methods used in hemato-oncology: sample collection, DNA/RNA isolation, in vitro culture, karyotype and FISH analysis, PCR and NGS testing. Analysis of selected clinical cases, interpretation of genetic test results.	C.W2, C.W5, C.W8, C.W9, C.W26, C.W42, C.U2, C.U3
Classes	Exercise 2 - <u>Genetic testing in selected hereditary cancers.</u> Genetic predisposition to cancer development. Recommendations for diagnostics and prevention. Application of knowledge regarding hereditary variants to implement targeted therapy, as exemplified by synthetic lethality and the use of PARP inhibitors in BRCA-mutated cancers. Analysis of patient cases and diagnostic tests illustrating the genetic basis of hereditary cancers. Interpretation of results and selection of appropriate genetic tests.	B.U8, C.W2, C.W5, C.W8, C.W9, C.W26, C.W42, C.W43, C.U2, C.U3, C.U4, E.W24.3
Classes	Exercise 3 - <u>Genetic testing in the diagnosis, classification and treatment of solid tumors.</u> Diagnostic and prognostic factors. Integration of high-throughput genetic data with other diagnostic techniques. Molecular targets and predictive factors in personalized oncology. Pathogenicity and clinical significance of genetic alterations. Causes of resistance to targeted therapy. Analysis of clinical cases and interpretation of test results.	B.U8, C.W5, C.W8, C.W9, C.W26, C.W42
Classes	Exercise 4 - <u>Molecular tumor board (MTB)</u> Analysis of clinical cases, determination of diagnostic and therapeutic procedures and recommendations for patients.	B.U8, C.W8, C.W43, C.U2, C.U3, C.U4

7. LITERATURE

Obligatory

Robbins, Cotran & Kumar Pathologic Basis of Disease (11. ed.), Kumar, Abbas, Aster, 2025; (selected chapters) Medical Genetics (6. ed.). Jorde, Carey, Bamshad, 2019; (selected chapters)

Supplementary

Molecular Biology of Cancer: Mechanisms, Targets, and Therapeutics (6. ed.). Pecorino; 2026; Selected publications and guidelines articles available in the e-learning platform as an integral part of the course

8. VERIFYING THE EFFECT OF LEARNING

Code of the course effect of learning	Ways of verifying the effect of learning	Completion criterion
<i>B.U8, C.W2, C.W5, C.W8, C.W9, C.W26, C.W42, C.W43, C.U2, C.U3, C.U4, E.W24.3</i>	Evaluation of students' preparation for seminars and exercises. Review of content posted on the e-learning platform. Assessment of active participation in seminars and exercises during classes. A multiple-choice question (MCQ) test covering material presented in seminars and exercises, consisting of 20 questions.	Completion of modules with short questions and quizzes on the e-learning platform. Positive evaluation by the teacher, confirming acquisition of relevant skills and competencies. Passing threshold: achievement of at least 60% of the maximum possible points. <i>e.g. threshold number of points</i>

9. ADDITIONAL INFORMATION

This subject is closely related to genetic research conducted at the Medical University of Warsaw and diagnostic work carried out at the Medical University of Warsaw Clinical Center. The presented clinical cases are examples from our own research and diagnostics activity.

Classes are held in weekly blocks from Monday through Friday during the winter semester.

Course regulations and a detailed schedule will be available on the website: <https://onkogenetyka.wum.edu.pl/en> before the start of the semester in which the classes are scheduled.

To successfully complete the course, students must fulfill the following requirements:

- 1) Complete all seminars on the e-learning platform,
- 2) Maintain 100% attendance at all classes,
- 3) Pass the final colloquium.

In the event of a single absence, it is possible to make up the class with another group. Making up more than one class or changing student groups requires consultation with the course coordinator.

The final colloquium is organized by the Exam Bureau with the use of computer rooms at the Teaching Center. The test consists of 20 single-choice or multiple-choice questions. Duration: 25 minutes. The pass threshold is 60%.

If a student fails to pass on two scheduled dates, a third attempt may be permitted, which may be oral or written (at the discretion of the Department Head), in accordance with the Medical University of Warsaw regulations on exams and course completion.

Academic consultations are possible after making an appointment with the teacher via e-mail or phone.

The Student Research Group (Scientific Club) "GenePath" is active at the Department.

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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



Introduction to Internal Medicine (including Medical Communication in Clinical Settings)

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	1. Department of Endocrinology, Diabetology and Internal Diseases (2W4); Mazovian Bródnowski Hospital, Kondratowicza 8, 03-242 Warsaw e-mail: endodiab@wum.edu.pl 2. Department of , Transplantology, Immunology, Nephrology and Internal Diseases (1W22) , 59 Nowogrodzka St. 02-006 Warsaw, ph: 48 22 502-12-32, e-mail: medycyna.transplantacyjna@wum.edu.pl
Head of Educational Unit / Heads of Educational Units	1. Prof. Przemysław Witek, MD, PhD (2W4) 2. Prof. Krzysztof Mucha, MD PhD (1W22)
Course coordinator	1. (2W4) Zuzanna Żak-Skryśkiewicz MD, e-mail: zuzanna.zak@wum.edu.pl 2. (1W22) Tomasz Pilecki MD, PhD,, e-mail: tomasz.pilecki@wum.edu.pl
Person responsible for syllabus	Zuzanna Żak-Skryśkiewicz MD, e-mail: zuzanna.zak@wum.edu.pl
Teachers	2W4: Przemysław Witek, MD, PhD Łukasz Działach, MD, PhD Michalina Hryniewicz, MD Marek Kowrach, MD, PhD Paweł Kuca, MD, PhD

	Roman Kuczerowski, MD, PhD Gustaw Laskowski, MD Justyna Nowak, MD Paweł Pawlik, MD Joanna Sobolewska, MD Agnieszka Wojciechowska – Luźniak, MD Izabela Wrzosek, MD Zuzanna Żak-Skryśkiewicz, MD 1W22: Tomasz Pilecki MD, PhD
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2. BASIC INFORMATION				
Year and semester of studies	III year, 5 & 6 winter/summer semester		Number of ECTS credits	6.00
FORMS OF CLASSES		Number of hours	ECTS credits calculation	
Contacting hours with academic teacher				
Lecture (L)		10	0,40	
Seminar (S)		20	0,80	
Classes (C)		65+ 6 hours of medical communication in a clinical settings	2,80	
e-learning (e-L)				
Practical classes (PC)				
Work placement (WP)				
Unassisted student's work				
Preparation for classes and completions		50	2,00	

3. COURSE OBJECTIVES	
O1	Ability to take medical history and perform effective physical examination.
O2	Ability to conduct differential diagnosis and to use proper diagnostic path.
O3	Interpretation of basic laboratory results and imaging studies.
Medical Communication in Clinical Settings:	
O4	Developing patient communication skills aimed at building an empathetic relationship based on respect and autonomy.
O5	Acquiring the knowledge and skills necessary for gathering information.

O6	Developing skills for communicating with patients from groups at risk of economic or social exclusion, while respecting their dignity.
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4. STANDARDS OF LEARNING – DETAILED DESCRIPTION OF EFFECTS OF LEARNING

Code and number of effect of learning in accordance with standards of learning	Effects in the field of: <i>(in accordance with appendix to the Regulation of Minister of Science and Higher education from 29th of September 2023)</i>
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Knowledge – Graduate* knows and understands:

E.W7 pkt. 1, 2, 3, 4, 5, 6, 7, 8, 9	environmental and epidemiological conditions, causes, symptoms, principles of diagnosis and therapeutic management of the most common adult internal medicine diseases and their complications: 1) cardiovascular diseases, including ischaemic heart disease, heart defects, endocardial diseases, myocardium, pericardium, heart failure (acute and chronic), arterial and venous vascular diseases, hypertension (primary and secondary), pulmonary hypertension; 2) respiratory diseases, including respiratory tract diseases, chronic obstructive pulmonary disease, asthma, bronchiectasis, cystic fibrosis, respiratory infections, tuberculosis, interstitial lung diseases, pleurisy, mediastinum, obstructive and central sleep apnoea, respiratory failure (acute and chronic), respiratory cancers; 3) digestive system diseases, including oral diseases, oesophagus, stomach and duodenum, intestines, pancreas, liver, biliary tract and gallbladder, tumours of the digestive system; 4) endocrine system diseases, including diseases of the hypothalamus and pituitary, thyroid, parathyroid, adrenal cortex and medulla, ovaries and testes, and neuroendocrine tumours, polyglandular syndromes, different types of diabetes, metabolic syndrome, obesity, dyslipidaemia and hypoglycaemia, ovarian, testicular and thyroid tumours, neuroendocrine tumours; 5) kidney and urinary tract diseases, including acute kidney injury and chronic kidney disease in all stages and their complications, glomerular diseases (primary and secondary, including diabetic nephropathy and systemic diseases) and interstitial kidney diseases, renal hypertension, renal cysts, kidney stones, urinary tract infections (upper and lower), kidney diseases during pregnancy, urinary tract tumours - kidney cancer, bladder cancer, prostate cancer; 6) haematopoietic system diseases, including bone marrow aplasia, anaemia, granulocytopenia and agranulocytosis, thrombocytopenia, acute and chronic leukaemias, myeloma, myeloproliferative neoplasms, myelodysplastic syndromes, haemorrhagic diathesis, thrombophilia, blood disorders in diseases of other organs; 7) Rheumatic diseases, including systemic connective tissue diseases (rheumatoid arthritis, early arthritis, systemic lupus erythematosus, Sjögren's syndrome, sarcoidosis, systemic scleroderma, idiopathic inflammatory myopathies), spondyloarthropathies, crystallopathies, erythema nodosum, arthritis associated with infectious agents, vasculitis and non-inflammatory joint and bone diseases (osteoarthritis, soft tissue rheumatism, osteoporosis, fibromyalgia), soft tissue and bone sarcomas; 8) allergic diseases, including anaphylaxis and anaphylactic shock and angioedema; 9) water-electrolyte and acid-base disorders (dehydration states, conductive states, electrolyte disturbances, acidosis and alkalosis);
E.W38	principles of health-seeking behaviour, the basics of prevention and early detection of the most common diseases of civilisation and the principles of screening for these diseases;

Skills– Graduate* is able to:

E.U1	take a medical history of an adult, including an older person, using skills regarding the content, process and perception of communication, taking into account the biomedical perspective and the patient's perspective;
E.U5 p. 1	perform a complete and focused physical examination of the adult appropriate to the specific clinical situation, including examination of: 1) physical examination

E.U9 p.1-38	recognize the most common symptoms of the disease in adults, use diagnostic tests and interpret their results, perform differential diagnosis, implement therapy, monitor the effects of treatment and assess indications for specialist consultation, in particular in the case of symptoms such as: 1) fever; 2) weakness; 3) loss of appetite 4) weight loss; 5) shock; 6) cardiac arrest; 7) impaired consciousness, including fainting; 8) edema; 9) rash; 10) coughing and expectoration; 11) hemoptysis; 12) dyspnea; 13) discharge from the nose and ear; 14) chest pain; 15) heart palpitations; 16) cyanosis; 17) nausea and vomiting; 18) swallowing disorders; 19) abdominal pain; 20) blood in stool; 21) constipation and diarrhea; 22) icterus 23) flatulence and abdominal mass; 24) anemia; 25) lymphadenopathy; 26) urination disorders; 27) hematuria and proteinuria; 28) menstrual disorders; 29) depressed mood and anxiety; 30) memory and cognitive disorders; 31) headache; 32) dizziness; 33) paresis; 34) convulsions; 35) back pain; 36) joint pain; 37) injury or burn; 38) dehydration and overhydration;
E.U12	identify conditions requiring treatment in a hospital setting;
E.U13	qualify the patient for vaccinations;
E.U14 p. 1	perform medical procedures and treatments, including: 1) measurement and assessment of basic vital functions (temperature, heart rate, blood pressure) and monitoring them using a cardiomonitor and a pulse oximeter;
E.U15	use personal protective equipment appropriate to the clinical situation;
E.U18	keep the patient's medical records, including in electronic form, in accordance with the law;
E.U21	provide health education to the patient, including nutritional education tailored to individual needs;
E.U22	apply rational antibiotic therapy depending on the patient's clinical condition;

E.U27	communicate with patients from groups at risk of economic or social exclusion, respecting their dignity;
E.U34 p. 2	use the following protocols (e.g. when transferring patient care, requesting or providing patient consultation): 2) RSVIP/ISBAR (R (Reason), S (Story), V (Vital signs), P (Plan)/I (Introduction), S (Situation), B (Background), A (Assessment), R (Recommendation).

* In appendix to the Regulation of Minister of Science and Higher education from 29th of September 2023 „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	Establishing and maintaining a meaningful, respectful relationship with the patient, while demonstrating understanding of differences in cultural backgrounds, values, and worldviews.
SC2	Acting in the best interests of the patient.
SC3	Maintaining medical confidentiality and respecting patients’ rights.
SC4	Providing patient care in accordance with ethical principles, with due awareness of the social determinants and limitations associated with illness.
SC5	Recognising and acknowledging one’s own limitations and engaging in self-assessment to identify gaps in knowledge and individual educational needs.
SC6	Promoting health-enhancing behaviours and practices.
SC7	Using reliable and objective sources of information, including appropriate knowledge and understanding of artificial intelligence (AI) tools.
SC8	Formulating conclusions based on one’s own measurements and observations.
SC9	Applying the principles of professional collegiality and effective teamwork, including collaboration with representatives of other healthcare professions, also within multicultural and multinational environments.
SC10	Formulating informed opinions on various aspects of professional practice.
SC11	Assuming responsibility for decisions made within the scope of professional practice, including responsibility for one’s own safety and the safety of others.

6. CLASSES		
Form of class	Class contents	Effects of Learning
Lectures (held online)	Imaging studies in the clinical practice (2 hrs). Interpreting laboratory tests in clinical practice (2 hrs). Beyond BMI: Understanding the Metabolic Syndrome. (2 hrs)	E.W7 pkt. 1, 2, 3, 4, 5, 6, 7, 8, 9 E.U9 p.1-38

	The many faces of Diabetes mellitus (2 hrs). Symptoms and signs of endocrine disorders. (2 hrs)	
Bedside classes	Training of practical issues connected with taking history, signs and symptoms assessment. Training of basic practical procedures. Training of differential diagnosis. Interpretation of basic lab tests, imaging studies and basics of ECG.	E.W7 pkt. 1-9, E.W38, E.U1, E.U5 pkt. 1, E.U9 pkt. 1- 38, E.U12, E.U13, E.U14 pkt. 1, E.U15, E.U18, E.U21, E.U22, E.U27, E.U34
Seminars	- History taking - Physical examination - Cardiovascular system – history taking and physical examination - Cardiovascular system part 2 – cardiac imaging and invasive procedures - Respiratory system – history taking and physical examination - Respiratory system – imaging and pulmonary function testing in respiratory medicine - Gastrointestinal system – history taking and physical examination. - Gastrointestinal system part 2 - imaging and invasive procedures. - Nephrology – history taking and physical examination - Endocrinology – clinical presentations of selected endocrinopathies (thyrotoxicosis, hypothyroidism, Cushing's syndrome, Addison's disease, acromegaly, hyperandrogenism and hypopituitarism) - Haematology – history taking and physical examination - Neurology – history taking and physical examination, some common presentations. - The musculoskeletal system – history taking and physical examination - Fluid and electrolyte disorders. - Arterial hypertension – classification, presentation, diagnosis and management - Heart failure – basic concepts and management - ECG – a methodical approach and ECG abnormalities - Pneumonia – presentation, diagnosis and management - Nutritional Disorders: From Malnutrition to Obesity. - Chronic Obstructive Pulmonary Disease (COPD) and Basics of Respiratory Failure.	E.W7 pkt. 1-9, E.W38, E.U1, E.U5 pkt. 1, E.U9 pkt. 1- 38, E.U12, E.U13, E.U14 pkt. 1, E.U15, E.U18, E.U21, E.U22, E.U27, E.U34

7. LITERATURE

Obligatory

- Oxford Handbook of Clinical Medicine, 11th edition
- Macleod's Clinical Examination, 15th edition

Supplementary

- Harrison's Principles of Internal Medicine, 22nd edition.
- Bate's Guide to Physical Examination and History Taking, 14th edition

8. VERIFYING THE EFFECT OF LEARNING

Code of the course effect of learning	Ways of verifying the effect of learning	Completion criterion
E.W7 pkt. 1-9, E.W38, E.U1, E.U5 pkt. 1, E.U9 pkt. 1- 38,	Active participation in all seminars and classes.	Obligatory attendance and active participation in all seminars and classes.

E.U12, E.U13, E.U14 pkt. 1, E.U15, E.U18, E.U21, E.U22, E.U27, E.U34	Preparing a power-point presentation of case report.	Presentation of case report.
	Oral colloquium at the end of the course with the appointed doctor separately for each subgroup.	3.0 (satisfactory).
E.U1, E.U27, E.U34	Completion of tasks during medical communication classes – conducting an interview with a patient and completing an observation form.	Obtaining at least 51% of the points for tasks completed during the classes.
	Continuous assessment by the instructor of the student's ability to apply the specified competencies during practical classes and patient case discussions.	A positive evaluation by the instructor of the student's demonstrated competencies.

9. ADDITIONAL INFORMATION

IMPORTANT!

This course covers material included in the **Objective Structured Clinical Examination (OSCE)**, which will be conducted during the **4th year of study**. Detailed information regarding the examination: <https://www.wum.edu.pl/en/osce-exam-new-model-assessing-clinical-skills>

Attendance is mandatory. The teaching unit determines how excused absences are to be made up. **Rules for attending classes with a dean group other than the student's assigned group:**

1. A prerequisite for a possible change of the dean group with which a student attends the course block is the Dean's approval for **Individual Organization of Studies (IOS)**. The rules governing IOS are set out in the **Study Regulations of the Medical University of Warsaw, Resolution No. 23/2026 of the Senate of the Medical University of Warsaw of 20 April 2026**.

The English version of the Study Regulations for the **2026/2027 academic year** is available on the Medical University of Warsaw English Division website: <https://ed.wum.edu.pl/pl/node/766>

2. A student who has been granted **IOS** submits a request to the course coordinator, specifying the dean group and teaching unit with which the classes were originally scheduled to take place, and indicating the dean group and teaching unit to which they are requesting a transfer.
3. The course coordinator, in consultation with the persons responsible for organizing classes in the receiving teaching unit, gives approval for the change of dean group and informs the teaching unit to which the student was originally assigned. A prerequisite for granting such a request is that the receiving group has **fewer than 25 students** and that the respective teaching unit has the organizational capacity to accommodate the change.

(2W4) 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. Some seminars and classes may be conducted as e-learning, depending on epidemiological situation.

Students are expected to come to the class on time. Students are required to bring doctor's apron, stethoscopes, shift shoes, flashlight, and personal protective equipment (depending on the epidemiological situation). Outer clothes must be left in the cloakroom downstairs. Jewelry must be removed from hands/wrists for the time of classes. Long hair must be tied back. To provide good learning environment for everyone, students are requested to turn off any electronic devices that might disturb the class. Arrangements for making up missed classes must be agreed individually with the physician assigned to the group within one day following the absence.

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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.



Medical Communication

1. COURSE INFORMATION

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
Teaching unit / teaching units	Medical Communication Unit 16 Litewska Street, Room 207, 00-575 Warsaw Tel.: +48 22 116 92 270 e-mail: skm@wum.edu.pl www.skm.wum.edu.pl
Head of unit / heads of units	Antonina Doroszevska, PhD antonina.doroszevska@wum.edu.pl
Course coordinator	Dominika Saad, MA dominika.saad@wum.edu.pl
Person responsible for the syllabus	Dominika Saad, MA dominika.saad@wum.edu.pl
Teaching staff	Antonina Doroszevska PhD, Iwona Drozdowska MD, Katarzyna Okulska-Codjovi MA, Mariola Piszczatowska-Oleksiewicz PhD, Dominika Saad MA

2. BASIC INFORMATION

Year and semester of study	Year 3, semesters 5 and 6	Number of ECTS credits	2
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FORM OF INSTRUCTION	Number of hours	ECTS credit calculation
Contact hours with an academic teacher		
lecture (L)	5 (e-learning)	0,2
seminar (S)	18	0,7
classes (C)	12	0,5
e-learning (e-L)		
practical training (PT)		
professional placement (PP)		
Student's independent work		
Preparation for classes and assessments	15	0,6

3. LEARNING OBJECTIVES	
C1	To develop patient communication skills based on respect, autonomy and empathy.
C2	To develop skills in motivating patients.
C3	To acquire knowledge and skills in managing patient expectations.
C4	To develop skills in communicating unfavourable information.
C5	To develop skills in shared decision-making with the patient regarding therapeutic recommendations and in taking action to support adherence.
C6	To acquire knowledge and skills in communicating with patients in special situations and with patients who have special needs.

4. TRAINING STANDARDS – DETAILED LEARNING OUTCOMES	
Code and number of effect of learning in accordance with standards of learning	Effects in the field of: <i>(in accordance with appendix to the Regulation of Minister of Science and Higher education from 29th of September 2023)</i>
In terms of skills, the graduate* is able to:	
D.U7.	develop and improve self-awareness, self-reflection and self-care, and reflect with others on their own way of communicating and behaving;

D.U9.	describe and critically evaluate their own behaviour and communication, taking into account the possibility of alternative behaviour;
D.U11.	adapt verbal communication to the needs of the patient, expressing themselves clearly and avoiding medical jargon;
D.U12.	recognise and analyse difficult situations and communication challenges, including crying, strong emotions, anxiety, interruptions, awkward and sensitive issues, silence, withdrawal, aggressive and demanding behaviour, and deal with them in a constructive manner;
D.U13.	establish contact with the patient and the person accompanying the patient in order to build an appropriate relationship (e.g. 4 Habits Model: Invest in the beginning, Demonstrate empathy, Recognize the patient's perspective, Invest in the end);
D.U14.	look at the situation from the patient's perspective, building an appropriate conversational context and using the elicitation method, and then incorporating this into the construction of verbal messages.
E.U1.	take a medical history of an adult, including an older person, using skills regarding the content, process and perception of communication, taking into account the biomedical perspective and the patient's perspective;
E.U23.	conduct a conversation with the patient taking into account the conversation pattern (starting the conversation, collecting information, explaining and planning, ending the conversation), including giving structure to such a conversation and shaping the relationship with the patient using the selected model (e.g. Calgary-Cambridge, Segue, Kalamazoo Consensus guidelines, Maastricht Maas Global), including by means of electronic communication;
E.U25.	provide the patient with information, adapting its quantity and content to the patient's needs and capabilities, and supplement verbal information with models and written information, including charts and instructions, and apply it appropriately;
E.U26.	make diagnostic and therapeutic decisions together with the patient (assess the patient's level of involvement, needs and possibilities in this regard, encourage the patient to take an active part in the decision-making process, discuss the advantages, disadvantages, expected results and consequences of the decision) and obtain informed consent patient;
E.U27.	communicate with patients from groups at risk of economic or social exclusion, respecting their dignity;
E.U30.	apply the principles of providing feedback (constructive, non-judgmental, descriptive) as part of team cooperation;
E.U31.	accept, explain and analyze your own role and responsibilities in the team and recognize your role as a doctor in the team;

* In appendix to the Regulation of Minister of Science and Higher education from 29th of September 2023 „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 instruction	Course content	Learning outcomes
Lectures	Calgary-Cambridge, Segue, Kalamazoo Consensus and Maastricht Maas Global models The patient's perspective and the PERSPECTIVE protocol Communication supporting adherence Shared decision-making and communication	D.U11, D.U13, D.U14.
Seminars	Doctor–patient communication in practice. Communication models. Barriers to communication. The self in communication with the patient. Feedback.	D.U7, D.U9, D.U13., D.U14, E.U23, E.U25., E.U27., E.U30., E.U31.
Seminars	Communication with a patient in special situations. Managing patient expectations. Assertiveness in communication with the patient. Managing the patient's emotions. Communication about vaccination.	D.U12, D.U14, E.U23, E.U25., E.U27
Seminars	Sharing serious information about the patient's health and demonstrating empathy.	D.U9, D.U12, E.U25.
Seminars	Shared decision-making, motivating the patient to follow therapeutic recommendations and introduce lifestyle changes. Skills supporting adherence.	D.U9, D.U11, E.U25., E.U26,
Seminars	Legal aspects of contact and communication with the patient in medical practice. Disinformation and communication with the patient.	D.U11, D.U12.
Seminars	Communication skills in practice.	D.U11, D.U12., D.U13., D.U14., E.U1., E.U23.
Practical classes	Gathering and providing information while taking the patient's perspective into account – simulations.	D.U11, D.U12., D.U13., D.U14., E.U1., E.U23., E.U25., E.U26., E.U30.
Practical classes	Managing patient expectations – simulations.	D.U9, D.U11, D.U12., D.U14. E.U23., E.U30.
Practical classes	Sharing serious information about the patient's health – simulations.	D.U11, D.U12, D.U14., E.U23., E.U25., E.U30.
Practical classes	Providing information, strengthening patients' motivation to follow recommendations, and shared decision-making – simulations.	D.U9, D.U14., E.U23., E.U25. E.U26, E.U27., E.U30.

7. LITERATURE

Required reading

1. Calgary-Cambridge, Segue, Kalamazoo Consensus and Maastricht Maas Global models in Silverman, J., Kurtz, S. and Draper, J., 2016. *Skills for communicating with patients*
2. Silverman, J., Kurtz, S. and Draper, J., 2016. *Skills for communicating with patients*. crc press. Chapters 2-7.

Supplementary reading

1. Silverman, J., Kurtz, S. and Draper, J., 2016. *Skills for communicating with patients*. crc press.
2. Hashim MJ. *Patient-Centered Communication: Basic Skills*. Am Fam Physician. 2017 Jan 1;95(1):29-34. PMID: 28075109.
3. Makoul G, Noble L, Gulbrandsen P, van Dulmen S; Consensus Working Group. *Reinforcing the humanity in healthcare: The Glasgow Consensus Statement on effective communication in clinical encounters*. Patient Educ Couns. 2024 May;122:108158. doi: 10.1016/j.pec.2024.108158. Epub 2024 Jan 17. PMID: 38330705.
4. Makoul G. *Human-centered healthcare: An organizing principle for reinforcing the humanity of healthcare*. Patient Education and Counseling. 2026;148:109559. doi:10.1016/j.pec.2026.109559. PMID: 41747569.
5. Rollnick S, Miller WR, Butler CC. *Motivational Interviewing in Health Care: Helping Patients Change Behavior*. 2 ed. New York: The Guilford Press; 2023.

8. METHODS OF VERIFYING LEARNING OUTCOMES

Course learning outcome symbol	Methods of verifying the learning outcome	Pass criterion
D.U7., D.U9., D.U11. D.U12., D.U13., D.U14., E.U1., E.U23., E.U25., E.U26., E.U27. E.U30., E.U31.	Knowledge test during Seminar 2. Conducting an interview with a simulated patient. Providing feedback on the course of the interview with the patient. Written self-reflection. Practical assessment of communication skills during Seminar 6.	Obtaining at least 51% of the points available from the knowledge test, practical assessment, in-class activity and written self-reflection.

9. ADDITIONAL INFORMATION

1. Person responsible for teaching in the relevant year of study: Dominika Saad, MA
2. Attendance at all seminars and practical classes is compulsory. A single absence must be made up with another group after consultation with the teacher responsible for the student's group.
3. Students wishing to attend all classes with another group are requested to submit an application for a group change at the beginning of the academic year to the Head of the Medical Communication Unit, Associate Professor Antonina Doroszewska, PhD. The application may be sent to the Unit's e-mail address: skm@wum.edu.pl. A group change is possible after obtaining the consent of the Head of the Medical Communication Unit. skm@wum.edu.pl
4. If a student does not pass the test on the first attempt, they are entitled to a first resit in the form of a resit test. If the student does not pass the first resit, they are entitled to a second resit in the form of an oral assessment.
5. If a student does not pass the skills assessment on the first attempt, the condition for passing it at the first resit is participation in classes indicated by the teacher and actively conducting an interview with a simulated patient (SP). If the student does not pass the skills assessment at the first resit, they are entitled to a second resit conducted in the same form.
6. Student Scientific Society for Medical Communication and Education at the Medical Communication Unit of the Medical University of Warsaw; supervisor: Associate Professor Antonina Doroszewska, PhD; e-mail: antonina.doroszewska@wum.edu.pl antonina.doroszewska@wum.edu.pl
7. Medical Communication Unit website: <https://skm.wum.edu.pl> <https://skm.wum.edu.pl>
8. The course content is included in the material assessed in the Objective Structured Clinical Examination (OSCE), which will be conducted in Year 4.

Detailed information about the examination: www.osce.wum.edu.pl/wl www.osce.wum.edu.pl/wl

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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.



Introduction to Pediatrics

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 with Clinical Assessment Unit. (2W9) 63a Żwirki i Wigury St., 02-091 Warsaw (Pediatric Hospital) Phone: 48 22 317 92 31 e-mail: obserwacjny.dsk@uckwum.pl
Head of Educational Unit / Heads of Educational Units	Assoc. Prof. Ernest Kuchar, MD, PhD
Course coordinator	Assoc. Prof. Ernest Kuchar, MD, PhD
Person responsible for syllabus	1. Anna Piwowarczyk, MD, anna.piwowarczyk@wum.edu.pl 2. Monika Wanke-Rytt, MD, PhD, monika.wanke@uckwum.pl
Teachers	Department of Pediatrics with Clinical Assessment Unit (2W9) Ernest Kuchar, MD, PhD Anna Piwowarczyk, MD, PhD

	Magdalena Okarska-Napierała, MD, PhD Monika Wanke-Rytt, MD, PhD Dominika Rykowska, MD Joanna Mańdziuk, MD Weronika Woźniak, MD
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2. BASIC INFORMATION

Year and semester of studies	3 rd year, 5 th and 6 th semester	Number of ECTS credits	4,00
FORMS OF CLASSES		Number of hours	ECTS credits calculation
Contacting hours with academic teacher			
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		40	1,60

3. COURSE OBJECTIVES

O1	Acquiring knowledge of child development, nutrition, and physiology from birth to puberty.
O2	Acquiring skills to examine a child's development both subjectively and physically across different stages.
O3	Caring for the child while fulfilling the doctor's role and enhancing skills to provide personalized care for both healthy and sick children.
O4	Describe health maintenance and preventive care for children: • nutrition, • vaccination, • screening tests • hydration • risk factor identification and modification.
O5	Learn effective team and interpersonal communication skills, including empathetic communication with parents or guardians of children.
O6	Apply principles of physiology and pharmacology to children from birth through adulthood, especially age-related changes.
O7	Acquiring knowledge of a physician's responsibilities, duties, and powers in pediatric and primary care units.

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 29th of September 2023*)

Knowledge – Graduate* knows and understands:

E.W1	principles of natural feeding, healthy child nutrition and obesity prevention, and nutritional modifications due to illness
E.W2	principles for the prevention of childhood diseases, including screening, balance testing and immunisation
E.W3	environmental and epidemiological conditions, causes, symptoms, principles of diagnosis and therapeutic management of the most common childhood diseases and their complications
E.W32	principles for dealing with suspicion and detection of an infectious disease
E.W38	principles of health-seeking behaviour, the basics of prevention and early detection of the most common diseases of civilisation and the principles of screening for these diseases

Skills– Graduate* is able to:

E.U2	take a medical history of the child and his/her caregivers, using skills regarding the content, process and perception of communication, taking into account the biomedical and patient perspectives
E.U6 p. 1	conduct a complete and focused physical examination of the child from neonatal to adolescent period, adapted to the specific clinical situation, including examination of: 1) pediatric examination
E.U8	perform check-up tests, including comparing anthropometric and blood pressure measurements with data on percentile charts, and assessing the degree of puberty;
E.U10	recognize the most common symptoms of the disease in children, apply diagnostic tests and interpret their results, conduct differential diagnosis, implement therapy, monitor the effects of treatment and assess indications for specialist consultation
E.U12	identify conditions requiring treatment in a hospital setting
E.U13	qualify the patient for vaccinations
E.U14 p. 1	perform medical procedures and treatments, including: 1) measurement and assessment of basic vital functions (temperature, heart rate, blood pressure) and monitoring them using a cardiomonitor and a pulse oximeter;
E.U15	use personal protective equipment appropriate to the clinical situation;
E.U21	provide health education to the patient, including nutritional education tailored to individual needs;
E.U29	identify possible indicators of violence, including domestic violence, conduct an interview to verify whether there is a risk that the patient is experiencing violence, make a note in the medical documentation and initiate the "Blue Card" procedure;

* In appendix to the Regulation of Minister of Science and Higher education from 29th of September 2023 „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	Legal regulations and basic methods for medical experimentation and conducting other medical research, including basic methods of data analysis
K2	the concept of medical error, the most common causes of medical errors and the principles of opinion in such cases
Skills– Graduate is able to:	
S1	collect information on the presence of risk factors for chronic diseases and plan preventive measures at different levels of prevention
S2	Act in a way to avoid medical errors
Social Competencies – Graduate is ready for:	
SC1	1) to establish and maintain deep and respectful contact with the patient, and to show understanding of world and cultural differences; 2) be guided by the patient's well-being; 3) respect the medical confidentiality and rights of the patient; 4) take action towards the patient on the basis of ethical principles, with awareness of the social conditions and limitations resulting from the disease, perceiving and recognizing their own limitations and making a self-assessment of deficits and educational needs; 6) promote pro-healthy behaviour; 7) use objective sources of information; 8) formulate conclusions from own measurements or observations; 9) implement 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; 10) formulating opinions concerning various aspects of professional activity; 11) assume responsibility for decisions taken in the course of professional activity, including in terms of own and other persons' safety.

6. CLASSES		
Form of class	Class contents	Effects of Learning
Seminar	1) physical and subjective paediatric investigation 2. psychomotor development 3 Feeding part 1 4 Nutrition part 2 5. evaluation of nutritional status 6. general state (state of consciousness, arrangement, body structure) 7 Skin, lymph nodes, head and neck examination 8 Basic symptoms and their differentiation in respiratory diseases (upper airways) 9 Basic symptoms and their differentiation in respiratory diseases (lower airways) 10 Basic symptoms and their differentiation in gastrointestinal diseases 11 Basic symptoms and their differentiation in urinary tract diseases 12 Basic symptoms and their differentiation in cardiovascular diseases 13 Basic symptoms and their differentiation in nervous system diseases (including febrile convulsions) 14. protective vaccinations 15 Acute infectious diarrhea	E.W1, E.W2, E.W3, E.W32, E.W38, E.U2, E.U6, E.U8, E.U10, E.U12, E.U13, E.U14, E.U15, E.U21, E.U29, K1, K2, S1, S2, SC1

	16 Fever 17. meningitis 18 Upper respiratory tract infections 19 Characteristics of individual development periods and assessment methods 20 Colloquium Materials: https://pediatria.wum.edu.pl/	
Classes	Week 1. Monday - Physical examination - collecting interview with parent of young child, interview with older child. Tuesday - Physical examination - general condition, assessment of vital functions. Nutrition of children in the 1st year of life Wednesday - Physical examination - head, neck, skin. Child development. Milestones. Thursday - Physical examination - chest, respiratory system. Friday - Physical examination - abdominal cavity (digestive system, urinary system, features of sexual maturation). Week 2 Monday - Physical examination - chest, cardiovascular system Tuesday - Basics of neurological examination. Skeletal and articular system. Wednesday - Child with fever (septicemia, upper respiratory tract infection). Thursday - Child with fever (meningitis, gastroenteritis). Friday - Colloquium Additional topics: • child development • WHO centile grids • child nutrition in practice • oral and intravenous hydration in practice • vaccinations in practice • skin lesions (rashes)	E.W1, E.W2, E.W3, E.W32, E.W38, E.U2, E.U6, E.U8, E.U10, E.U12, E.U13, E.U14, E.U15, E.U21, E.U29, K1, K2, S1, S2, SC1

7. LITERATURE

Obligatory

Obligatory literature:

1. Tom Lissauer, Will Carroll. Illustrated Textbook of Paediatrics, Elsevier. Fifth edition. (with. T. Lissauer, W.Carroll. Self-assessment in Paediatrics).
2. Karen J. Marcante, Robert M. Kliegman: Nelson Essentials of Pediatrics. Elsevier, Eighth edition
3. Denis Gill, Niall O'Brien. Paediatric Clinical Examination- made easy. Elsevier, Sixth edition.
4. L.S. Bickley MD, Bates' Pocket Guide to Physical Examination & History Taking, Lippincott Williams & Wilkins,

Supplementary

<http://szczepienia.pzh.gov.pl/en/immunization-schedule/> - Polish vaccination schedule

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.W2, E.W3, E.W32, E.W38, E.U2, E.U6, E.U8, E.U10, E.U12, E.U13, E.U14, E.U15, E.U21, E.U29, K1, K2, S1, S2, SC1	<i>Credit for the exercises is given by the assistant on the basis of the student's participation in the exercises.</i> <i>Attendance of the student in all classes is mandatory; max. 1 day of excused absence (the form of homework must be agreed with the course coordinator). /three lateness (more than 15 minutes) to class are equivalent to one absence</i> <i>In the case of unexcused absences or more excused absences, the student must complete the entire block at a different date (to be agreed with the course coordinator).</i> <i>The coursework includes the completion of the exercises and the colloquium on the subject discussed during the class</i>	<i>Completion by assistant</i> <i>Written test (15 questions, minimum nine questions required)*</i> <i>*In the case of a negative assessment, the date of the correctional colloquium is agreed upon with the course coordinator within a maximum of 2 weeks from the end of the class.</i>

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 classes, students are required to have: a doctor's apron/scrubs, stethoscope, flashlight, badge, shift shoes and personal protective equipment. Please follow the rule of "nothing below the elbow" (no jewelry, watches or painted nails).

The student has the opportunity to evaluate the classes by filling in the university's evaluation questionnaire for classes and academic teachers. Additionally, students can submit their comments directly to the Clinic Secretariat. All suggestions for conducting classes will be considered with utmost care.

Students who are late to class for more than 15 minutes will not be allowed into the Department in the absence of a reasonable excuse

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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.



Oral and Maxillofacial Surgery and Propaedeutic of Stomatology

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 Periodontology and Oral Diseases (WLS5), UCS University Dentistry Center at 6 Binieckiego St, 02-097 Warsaw e-mail: sluzowki@wum.edu.pl
Head of Educational Unit / Heads of Educational Units	Assoc. Prof. Jan Kowalski, MD PhD
Course coordinator	Dr n. med. Andrzej Miskiewicz; phone (22) 2701616, mobile 513445674, e-mail: andrzej.miskiewicz@wum.edu.pl

Person responsible for syllabus	Dr n. med. Andrzej Miskiewicz; phone (22) 2701616, mobile 513445674, e-mail: andrzej.miskiewicz@wum.edu.pl
Teachers	prof. Kazimierz Szopiński – dental radiology dr hab. n.med Ewa Czochońska – orthodontics dr n.med. Anna Widmańska - orthodontics dr n.med. Andrzej Miskiewicz – periodontology dr n.med. Zygmunt Stopa – maxillofacial surgery dr n.med. Iwona Sobiech – pediatric dentistry lek. stom Magdalena Świątkowska-Bury – pediatric dentistry

2. BASIC INFORMATION

Year and semester of studies	III year, 6-th semester		Number of ECTS credits	1.00
FORMS OF CLASSES		Number of hours	ECTS credits calculation	
Contacting hours with academic teacher				
Lecture (L)		-	-	
Seminar (S)		20	0,50	
Classes (C)		10	0,30	
e-learning (e-L)		-	-	
Practical classes (PC)		-	-	
Work placement (WP)		-	-	
Unassisted student's work				
Preparation for classes and completions		5	0.20	

3. COURSE OBJECTIVES

O1	Gaining basic knowledge about oral and maxillofacial conditions.
O2	Learning the principles of clinical and radiological diagnostics of oral cavity diseases.
O3	Getting acquainted in the interactions between oral medicine and systemic health.

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 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 29th of September 2023)	
Knowledge – Graduate* knows and understands:		
Skills– Graduate* is able to:		
E.U15	use personal protective equipment appropriate to the clinical situation;	
E.U18	keep the patient's medical records, including in electronic form, in accordance with the law;	
E.U22	apply rational antibiotic therapy depending on the patient's clinical condition;	
E.U26	make diagnostic and therapeutic decisions together with the patient (assess the patient's level of involvement, needs and possibilities in this regard, encourage the patient to take an active part in the decision-making process, discuss the advantages, disadvantages, expected results and consequences of the decision) and obtain informed consent patient;	
* In appendix to the Regulation of Minister of Science and Higher education from 29th of September 2023 „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	health assessment methods of an individual and a population, disease and medical procedure classification;	
K2	environmental and epidemiological conditions of the most common cancers;	
Skills– Graduate is able to:		
S1	collect medical history from adult patients;	
S2	conduct a complete and targeted physical examination in adults;	
Social Competencies – Graduate is ready for:		
SC1	assist in a typical surgery, prepare the surgical field and use local anaesthetics at the operated area;	
SC2	observe the rules of asepsis and antisepsis;	
6. CLASSES		
Form of class	Class contents	Effects of Learning

Lecture 1	The new approach in pediatric dentistry.	
Lecture 2	Dental trauma.	
Lecture 3	Selected diseases of the oral cavity requiring surgical approach.	
Lecture 4	Maxillofacial surgical treatment.	
Lecture 5	Orthodontic diagnosis.	
Lecture 6	Orthodontic treatment.	
Lecture 7	Relationship between periodontal and systemic diseases.	
Lecture 8	Symptoms of systemic diseases and disorders in the oral cavity.	
Lecture 9	Introduction to dentomaxillofacial radiology. Part I.	
Lecture 10	Introduction to dentomaxillofacial radiology. Part II.	

7. LITERATURE

Obligatory

Periodontology: The Essentials. *Hans-Peter Mueller*; Georg Thieme 2015 Ed. II

Supplementary

Clinical Periodontology and Implant Dentistry. *Niklaus P. Lang and Jan Lindhe*; John Wiley & Sons 2015

8. VERIFYING THE EFFECT OF LEARNING

Code of the course effect of learning	Ways of verifying the effect of learning	Completion criterion
<i>O1-O3</i>	<i>Credit</i>	<i>Presence</i>
<i>G.K1-G.K5</i>	<i>Credit</i>	<i>Presence</i>
<i>G.S1-G.S2</i>	<i>Credit</i>	<i>Presence</i>
<i>K1-K2</i>	<i>Credit</i>	<i>Presence</i>
<i>S1-S2</i>	<i>Credit</i>	<i>Presence</i>
<i>SC1-SC2</i>	<i>Credit</i>	<i>Presence</i>

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)

Knowledge from the anatomy and physiology, confirmed with the passed curricula on the 1st and 2nd year. Crediting the propedeutics of stomatology is based on attendance at all lectures. Therefore, attendance at all lectures is necessary to obtain a credit for the course. It is not possible to repeat a given lecture, as it is held only once and only in the summer semester.

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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; magdalena.los@wum.edu.pl

Teachers	Dr hab. Magdalena Łoś Dr Anna Jagielska Dr Aleksandra Kozłowska
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2. BASIC INFORMATION

Year and semester of studies	3rd year, 1 st an 2 nd semester	Number of ECTS credits	2.00
FORMS OF CLASSES	Number of hours	ECTS credits calculation	
Contacting hours with academic teacher			
Lecture (L)	10 (in the form of e-learning)	0,40	
Seminar (S)	20	0.8	
Unassisted student's work			
Preparation for classes and completions	20	0.8	

3. COURSE OBJECTIVES

O1	To gain the knowledge from public health field.
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4. STANDARDS OF LEARNING – DETAILED DESCRIPTION OF EFFECTS OF LEARNING

Code and number of the effect of learning in accordance with standards of learning	Effects in the field of: <i>(in accordance with appendix to the Regulation of Minister of Science and Higher education from 29th of September 2023)</i>
Knowledge – Graduate* knows and understands:	
D.W2	concepts of health and illness, the influence of the social environment (family, work, social relations) and socio-cultural conditions (origin, social status, religion, nationality and ethnic group) on the patient's health;
D.W16	patient rights and the concept of patient welfare;
D.W20	the concepts of patient safety and safety culture and their organisational, communication and management aspects
G.W1	methods for assessing the health of individuals and populations, measures and principles of monitoring the health of populations, systems of classifying diseases and medical procedures;
G.W4	the concept and functions of public health, the concept, tasks and methods of health promotion, the concept of quality in health care and factors influencing it, the structure and organization of the health care system at the national and global level, as well as the impact of economic conditions on health care opportunities;

G.W5	legal regulations regarding patients' rights and the Patient Ombudsman, as well as legal regulations relevant to medical activities in the field of labor law, the basics of practicing the medical profession and the functioning of the medical self-government;
G.W6	legal regulations regarding the organization and financing of the health care system, the provision of health services financed from public funds and the principles of organizing healthcare entities, the principles of operation of information and communication tools and services in health care (e-health);
G.W7	the doctor's legal obligations to pronounce the patient's death;
G.W9	legal regulations regarding transplants, artificial procreation, termination of pregnancy, aesthetic treatments, palliative care, persistent therapy, mental illnesses, infectious diseases;
G.W12	legal regulations regarding medical confidentiality, criminal, civil and professional liability of doctors, rules for maintaining, storing and sharing medical records, including e-documentation, and the protection of personal data;
G.W18	the concept and typology of adverse events, including medical malpractice and medical events, their most common causes, effects, principles of prevention and assessment in such cases;
G.W20	legal regulations regarding the transfer of information regarding the patient's health during life and after his death, taking into account the scope of information, the group of persons entitled to obtain information and the rules for its transfer to other persons, as well as limitations on the scope of information transferred;

Skills– Graduate* is able to:

B.U8	use medical databases and correctly interpret the information they contain to solve problems in basic and clinical sciences;
D.U3	respect patients' rights;
E.U18	keep the patient's medical records, including in electronic form, in accordance with the law;
G.U1	describe the demographic structure of the population and, on this basis, assess and predict health problems of the population;
G.U2	collect information on the conditions and presence of risk factors for infectious and noncommunicable diseases and plan preventive activities at various levels of prevention;
G.U3	interpret positive and negative measures of health;
G.U4	assess the epidemiological situation of infectious and non-communicable diseases in the Republic of Poland and in the world;
G.U5	explain to people using health services their basic rights and the legal basis for providing these services;
G.U6	issue medical certificates and medical opinions, prepare opinions for the patient, authorized bodies and entities, prepare and maintain medical records (in electronic and paper form) and use information and communication tools and services in health care (e-health);
G.U8	act in a way that prevents undesirable events and ensures maintaining quality in the protection of patient health and safety, monitors and responds to the occurrence of adverse events, informs about their occurrence and analyzes their causes;

* In appendix to the Regulation of Minister of Science and Higher education from 29th of September 2023 „graduate”, not student is mentioned.

5. ADDITIONAL EFFECTS OF LEARNING (non-compulsory)

Number of effect of learning	Effects in the fields of:
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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
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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
Lectures (e-learning form)	L1 (2h e-l) – Essentials of Public Health. L2 (2h e-l) – Basics of medical law and patient's rights. L3 (2h e-l) – International healthcare systems profiles. L4 (2h e-l) – Basics of organization and healthcare management. L5 (2h e-l) – E-health and telemedicine.	D.W2, D.W16, D.U3, E.U18, G.W1., G.W4, G.W6, W1-W2, U1, K1-K5
Seminars	S1 – Introduction to Public Health: - Basics definitions and concepts; - Health promotion and disease prevention; - The place of public health and health education in the healthcare system. S2 – Basics of medical certification, medical 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.	B.U8, D.U3, D.W16, G.U1-G.U6, G.W1-G.W6, W1-W2, U1, K1-K5

7. LITERATURE

Obligatory

1. Detels R., et al., Oxford Textbook of Global Public Health (7 edn), Oxford Medicine 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.W2, D.W16, G.W1- G.W6, B.U8, D.U3, E.U18, G.U1-G.U6	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.W2, D.W16, G.W1- G.W6, B.U8, D.U3, E.U18, G.U1-G.U6	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.
W1-W2, U1, K1-K5	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: magdalena.los@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 supervised 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

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.

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



INTERNSHIP AFTER THE THIRD YEAR OF STUDIES

Internal Medicine

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	
Head of Educational Unit / Heads of Educational Units	
Course coordinator	Joanna Kacperczyk-Bartnik, MD, PhD, e-mail: joanna.kacperczyk-bartnik@wum.edu.pl (1W61) II Department of Obstetrics and Gynecology, MUW 2 Karowa St., 00-315 Warsaw Phone: 48 22 59 66 421
Person responsible for syllabus	
Teachers	

2. BASIC INFORMATION

Year and semester of studies	After the third year of studies	Number of ECTS credits	4
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FORMS OF CLASSES	Number of hours	ECTS credits calculation
Contacting hours with academic teacher		
Lecture (L)		
Seminar (S)		
Classes (C)		
e-learning (e-L)		
Practical classes (PC)		
Work placement (WP)	120	4
Unassisted student's work		
Preparation for classes and completions		

3. COURSE OBJECTIVES	
O1	Acquiring practical skills in internal medicine

4. STANDARDS OF LEARNING – DETAILED DESCRIPTION OF EFFECTS OF LEARNING	
Code and number of the effect of learning in accordance with standards of learning	Effects in the field of: <i>(in accordance with appendix to the Regulation of Minister of Science and Higher education from 29th of September 2023)</i>
Knowledge – Graduate* knows and understands:	
G.K1	
Skills– Graduate* is able to:	
D.U7	develop and improve self-awareness, self-reflection and self-care, and reflect with others on their own way of communicating and behaving;
D.U8	recognise their own emotions and manage them in their relationships with others in order to perform their work effectively despite their own emotional reactions;
D.U10	use open and closed questions, paraphrase, clarification, internal and final summaries, signaling, active listening (e.g. capturing and recognizing signals sent by the interlocutor, verbal and nonverbal techniques) and facilitation (encouraging the interlocutor to speak) appropriate to the situation;

D.U11	adapt verbal communication to the needs of the patient, expressing themselves clearly and avoiding medical jargon;
D.U12	recognise and analyse difficult situations and communication challenges, including crying, strong emotions, anxiety, interruptions, awkward and sensitive issues, silence, withdrawal, aggressive and demanding behaviour, and deal with them in a constructive manner;
D.U13	establish contact with the patient and the person accompanying the patient in order to build an appropriate relationship (e.g. 4 Habits Model: Invest in the beginning, Demonstrate empathy, Recognize the patient's perspective), Invest in the end);
D.U14	look at the situation from the patient's perspective, building an appropriate conversational context and using the elicitation method, and then incorporating this into the construction of verbal messages;
E.U1	take a medical history of an adult, including an older person, using skills regarding the content, process and perception of communication, taking into account the biomedical perspective and the patient's perspective
E.U5 pkt 1	perform a complete and focused physical examination of the adult appropriate to the specific clinical situation, including examination of: 1) physical examination
E.U9	recognize the most common symptoms of the disease in adults, use diagnostic tests and interpret their results, perform differential diagnosis, implement therapy, monitor the effects of treatment and assess indications for specialist consultation, in particular in the case of symptoms such as:
E.U14	perform medical procedures and treatments;
E.U16	declare the patient dead;
E.U18	keep the patient's medical records, including in electronic form, in accordance with the law;
E.U32	obtain information from team members, respecting their diverse opinions and specialized competences, and take this information into account in the patient's diagnostic and therapeutic plan;
E.U33	discuss the patient's situation within the team, excluding subjective assessments, respecting the patient's dignity;

* 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	Graduate supplemented the information on the organization of the internal medicine department and the organizational connection of the department/clinic with open treatment; got to know the rules of admission to the department, keeping medical records and discharge of the patient
Skills– Graduate is able to:	
S1	
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	being guided by the patient's well-being;

SC3	respecting medical confidentiality and the patient's rights;
SC4	taking action towards the patient based on ethical principles, with awareness of the social conditions and limitations resulting from the disease;
SC5	perceiving and recognising one's own limitations and making self-assessment of deficits and educational needs;
SC6	promoting pro-health behaviours;
SC7	using objective sources of information;
SC8	formulating conclusions from one's own measurements or observations;
SC9	implementing the principles of professional camaraderie and cooperation in a team of specialists, including with representatives of other medical professions, also in a multicultural and multinational environment;
SC10	formulating opinions on various aspects of professional activity;
SC11	accepting responsibility for decisions made as part of professional activity, including in terms of one's own safety and the safety of others.

6. CLASSES		
Form of class	Class contents	Effects of Learning

7. LITERATURE
Obligatory
Supplementary

8. VERIFYING THE EFFECT OF LEARNING		
Code of the course effect of learning	Ways of verifying the effect of learning	Completion criterion
<i>e.g. G.K1, G.S1, K1</i>	<i>This field defines the methods used for grading students e.g. pop quiz, test, written report etc.</i>	<i>e.g. threshold number of points</i>
D.U7, D.U8, D.U10, D.U11, D.U12, D.U13, D.U14, E.U1, E.U5 pkt 1, E.U9, E.U14, E.U16, E.U18, E.U32	Completed internship card and information about the internship coordinator with: - assessment of practical skills (made by the internship coordinator based on student observation) – max 9 points Rating scale: very good (5.0): 8-9 points good (4.0): 6-7 points	The condition for passing the internship is to obtain at least a satisfactory grade in terms of both the practical skills and social competences.

E.U33, K1, SC1-11	sufficient (3.0): 5 points insufficient (2.0): below 5 points - assessment of social competences and professionalism (made by the internship coordinator based on student observation) - max 10 points Rating scale: very good (5.0): 9-10 points good (4.0): 7-8 points sufficient (3.0): 5-6 points insufficient (2.0): below 5.0 points	Placement of the internship by the Internship Supervisor of the Medical University of Warsaw
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9. ADDITIONAL INFORMATION

(Please write here Information essential for the course instructor that are not included in the other part of the course syllabus, particularly the number of acceptable tries for passing a subject (§ 26, § 27 and § 28 of Study Regulations), including exam admission passes, and e.g. if the course is related to scientific research, detailed description of, information about the Science Club)

Information on internships is available on the faculty website: <https://ed.wum.edu.pl/node/763>

Please read the Regulations for internships at the Faculty of Medicine, WUM, available on the website.

Internships are held during the summer holidays.

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

ATTENTION

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

VOCATIONAL TRAINING

Internal Medicine – 4 weeks – 140h
3rd year, 6-year program ED students
Faculty of Medicine

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

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

The curriculum of clinical clerkship comprises:

a four-week training in the internal medicine ward.

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

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

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

The goal of the clinical instruction is to make a practical use of the knowledge acquired in the course of the study e.g., bacteriology, virology, pathomorphology, pathophysiology, pharmacology, and particularly of the clinical subjects i.e. introduction, to medicine and pediatrics.

The clinical instruction should include the following aspects:

- information about the organization of medical ward and their cooperation with the outpatients' department,
- further improvement in taking histories and performing physical examination,
- particularly concerned with assessment of patients' general condition and their psychology,
- planning and collecting specimens for accessory investigations and interpretation of the results,
- improving the skills in differentiating and diagnostic basic clinical entities, particularly
- acute cases, and principles of treatment,
- providing first aid,
- performing everyday clinical procedures (injections and intravenous infusions, catheterization, lumbar puncture, bone marrow puncture and paracentesis of the body cavities), participation in ward rounds and consultations by other specialists

Throughout the course of the 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.