



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

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

1st YEAR CURRICULUM

6-year program

Warsaw, 2020/2021

SCHEDULE – ACADEMIC YEAR 2020/2021
6-year program

WINTER SEMESTER – 01.10.2020 – 21.02.2021

STUDENT'S ACADEMIC CLASSES:	01.10.2020 – 20.12.2020 03.01.2021 – 31.01.2021
WINTER HOLIDAYS:	21.12.2020 – 02.01.2021
EXAM SESSION:	1.02.2021 – 07.02.2021
DAYS OFF BETWEEN SEMESTER:	08.02.2021 – 14.02.2021
RETAKE EXAM SESSION:	15.02.2021 – 21.02.2021

SUMMER SEMESTER – 22.02.2021 – 30.09.2021

STUDENT'S ACADEMIC CLASSES:	22.02.2021 – 02.04.2021 10.04.2021 – 2.05.2021 08.05.2021 – 20.06.2021
EASTER HOLIDAYS:	03.04.2021 – 09.04.2021
SPRING HOLIDAYS:	03.05.2021 – 07.05.2021
EXAM SESSION:	21.06.2021 – 11.07.2021
SUMMER HOLIDAYS:	12.07.2021 – 29.08.2021
RETAKE EXAM SESSION:	30.08.2021 – 5.09.2021
SUMMER HOLIDAYS:	06.09.2021 – 30.09.2021

Curriculum of 1st year of 6-year 2020/2021 ED program and the list of contents

1st year

page	subject	form of credit	semester	Total no of hours	including				ECTS
					lecture	seminar	class	practical	
	Anatomy	exam	1&2	254	40	54	160		24
4	Histology with Embryology	exam	1&2	100	10	30	60		10
	Occupational Safety and Health at Work/Study	credit	1	4	4				1
13	Biophysics	credit	2	34	4	15	15		3
	Statistics and Medical Informatics	credit	1&2	34	4	6	24		2
20	History of Medicine	credit	2	30		30			1
25	Latin in Medicine	credit	1&2	20			20		1
31	Basic Polish	credit	1&2	80			80		5
38	Introduction to Molecular Biology	credit	1	20		5	15		2
59	Propedeutics of Addiction Medicine	credit	2	15		5	10		1
43	Library Training	credit	1&2	2		2			0
48	Sport training	credit	1	30			30		0
53	First Aid with the Elements of Nursing	credit	2	45		9	36		3
-	Vocational training	credit	2	120				120	4
-	Optional course	credit	1&2	60		60			4
				848	62	216	450	120	61



Histology and Embryology

1. IMPRINT	
Academic Year	2020/2021
Department	<p>Department of Histology and Embryology Center for Biostructure Research 02-004 Warszawa, Chałubińskiego 5 Str.(Anatomicum bldg.) Web site: http://histologia.wum.edu.pl Department office is open for students on working days. Business hours 9: 30 - 14: 00, tel/fax 22 629-5282.</p>
Field of study	medicine
<p>Main scientific discipline <i>(in accord with appendix to the Regulation of Minister of Science and Higher education from 26th of July 2019)</i></p>	medical science
<p>Study Profile <i>(general academic / practical)</i></p>	general academic
<p>Level of studies <i>(1st level /2nd level/ uniform MSc)</i></p>	uniform
Form of studies	full-time studies
<p>Type of module / course <i>(obligatory / non-compulsory)</i></p>	obligatory

Form of verification of learning outcomes (<i>exam / completion</i>)	exam
Educational Unit / Educational Units (<i>and address / addresses of unit / units</i>)	the English Division of the Faculty of Medicine
Head of Educational Unit / Heads of Educational Units	Jacek Malejczyk, Ph.D. Professor
Course coordinator (<i>title, First Name, Last Name, contact</i>)	Jacek Malejczyk, Ph.D., Professor jacek.malejczyk@wum.edu.pl
Person responsible for syllabus (<i>First name, Last Name and contact for the person to whom any objections concerning syllabus should be reported</i>)	Jacek Malejczyk, Ph.D., Professor jacek.malejczyk@wum.edu.pl
Teachers	Jacek Malejczyk, Ph.D., Professor Paweł Włodarski, M.D., D.D.S., Ph.D., Professor Stanisław Moskalewski, M.D., Ph.D., Professor Marek Kujawa, M.D., Ph.D. Anna Hyc, Ph.D., Associate professor Anna Iwan, Ph.D., Associate professor Izabela Młynarczuk-Biały, M.D., Ph.D., Associate professor Łukasz Biały, M.D., Ph.D. Ewa Jankowska Steifer, Ph.D., Associate professor Izabela Uhrynowska-Tyszkiewicz, M.D., Ph.D. Justyna Niderla-Bielińska, Ph.D., Associate professor Aneta Ścieżyńska, Ph.D. Ilona Kalaszczyńska, Ph. D.

2. BASIC INFORMATION			
Year and semester of studies	1 (1 and 2 semester)	Number of ECTS credits	10
FORMS OF CLASSES		Number of hours	ECTS credits calculation
Contacting hours with academic teacher			
Lecture (L)		10	0,5
Seminar (S)		15	0,5
Discussions (D)		-	

e-learning (e-L)	15	0,5
Practical classes (PC)	60	5
Work placement (WP)	-	
Unassisted student's work		
Preparation for classes and completions	100	3,5

3. COURSE OBJECTIVES

The aim of the course of Histology and Embryology is to demonstrate and explain structure of the cell, tissues and organs. Starting from the ultrastructure of the cell, which is discussed along with the function of the organelles, microscopic anatomy of all human tissues and major organs is shown. During the classes, functional connection between microscopic anatomy of the organ and the function is highlighted. This is the background for further education of Biochemistry, Physiology and Pathology. Basis of the molecular biology and examples of diagnostic methods are lectured.

O1	Gaining knowledge regarding structure and function of the cell organelles, tissues and organs, as well as morphological adaptation of tissues to their function.
O2	Gaining knowledge regarding the development of the embryo, development and function of fetal membranes and the most common fetal abnormalities.
O3	Gaining knowledge regarding identification of histological specimens and characteristic elements of the tissues under the microscope.

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)*

<p>Code and number of effect of learning in accordance with standards of learning</p> <p><i>(in accordance with appendix to Regulation of Minister of Science and Higher education from 26th July 2019)</i></p>	<p>Effects in time</p>
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Knowledge – Graduate* knows and understands:

G.K1	A.W1. Graduate should know anatomical histological and embryological nomenclature in Polish and English
G.K2	A.W4. Graduate should know basic cell structures and their functional specialization

G.K3	A.W5. Graduate should know microarchitecture of tissues, extracellular matrix and organs
G.K4	A.W6. Graduate should know developmental stages of human embryo, composition and function of fetal membranes and placenta, as well as developmental stages of systems and organs
G.K5	B.W18. Graduate should know enzymes participating in digestion, mechanism of production of hydrochloric acid in the stomach, the role of bile, physiology of digestion, product absorption and disturbances connected with these processes
G.K6	B.W27. Graduate should know physiology and regulation of reproductive functions of women and men

Skills– Graduate* is able to:

G.S1	A.U1. Student should know how to use optical microscope – also when using immersion technique
G.S2	A.U2. Student should recognize histological structures of organs, tissues, cells and cellular structures under an optical and electron microscope; student should be able to describe and interpret their structure and relations between structure and function
G.S3	A.U5. Student should be able to use anatomical, histological and embryological nomenclature in oral and written expression.

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

5. ADDITIONAL EFFECTS OF LEARNING (non-compulsory)	
Number of effect of learning	Effects of learning i time
Knowledge – Graduate knows and understands:	
K1	
K2	
Skills– Graduate is able to:	
S1	
S2	
Social Competencies – Graduate is ready for:	
SC1	
SC2	

6. CLASSES		
Form of class	Class contents	Effects of Learning
W – Lectures	<p>W1 – Hematopoiesis mechanisms – clinical considerations.</p> <p>W2 – Muscle cells in health and in disease.</p> <p>W3 – Hormonal regulation of hypothalamus – hypophysis – ovary – uterus axis. Gamete formation and menstrual cycle.</p> <p>W4 – Fertilization and embryo formation till blastocyst stage.</p> <p>W5 – Implantation and its regulation via growth and differentiation factors. Immunological issues of fertilization, improper places of implantation, embryo formation (presomite stage).</p> <p>W6 – Development of chorionic cavity and trophoblast. Neural tube and neural crest formation, differentiation of mesoderm, blood vessel formation, embryo folding, endoderm differentiation, pharyngeal cleft and pouches.</p> <p>W7 – Placenta formation, umbilical cord, maternal and fetal circulation, congenital malformations.</p> <p>W8 – Connective tissue regeneration and degradation.</p> <p>W9 – Angiogenesis – therapeutic approach.</p> <p>W10 – Challenges of modern medicine.</p>	G.G1, G.K2, G.K3, G.K4, G.K5, G.K6
(S) Seminars; (C) Practical classes;	<p>S1 - Microscope, histological technique. C1 - Various cell types.</p> <p>S2 - Compartments of cells and their function. C2 - Electron microscope and cell structure.</p> <p>S3 - Cell cycle and its regulation. C3 - Cell division.</p> <p>S4 - Structure and function of epithelial tissue. C4 - Epithelial tissue, glands.</p> <p>S5 - Structure and function of connective tissue proper and adipose tissue. C5 - Connective tissue proper and adipose tissue.</p> <p>S6 - Structure of cartilage and bone. C6 - Cartilage and bone.</p> <p>S7 - Development of various types of bone tissue; remodeling of bones. C7 - Bone formation.</p> <p>S8 - Structure, organization and function of peripheral nervous system. C8 - Nervous tissue. Peripheral nervous system.</p> <p>S9 - Structure, organization and function of muscular tissue. C9 - Muscle.</p> <p>S10 - Formation of particular types of blood cells. C10 - Blood and bone marrow.</p> <p>S11 - Structure of vessels with particular emphasis on function of endothelial cells.</p>	G.G1, G.K2, G.K3, G.K4, G.K5, G.K6, G.S1, G.S2, G.S3

	<p>C11 - Circulatory system.</p> <p>S12 - Retake of the weekly tests. Students credit of the practical classes before Intermediate Examination.</p> <p>C12 – Demonstration of histological slides before the intermediate examination – general histology.</p> <p>S13 - Demonstration of histological slides before the intermediate examination – general histology.</p> <p>C13 – Slide practice before intermediate examination – general histology</p> <p>S14 - Hormones produces by the hypophysis, regulation by the hypothalamus.</p> <p>C14 - Endocrine glands.</p> <p>S15 - Structure of female reproductive system and its hormonal regulation.</p> <p>C15 - Female reproductive system.</p> <p>S16 - Structure of male reproductive system and hormone regulation.</p> <p>C16 - Male reproductive system.</p> <p>S17 - Structure of the immune system, types of lymphocytes, lymphokines.</p> <p>C17 - Immune system</p> <p>S18 - Structures of the oral cavity.</p> <p>C18 - Gastro-intestinal system, part 1.</p> <p>S19 - Glands in stomach and intestines structure and function.</p> <p>C19 - Gastro-intestinal system, part 2.</p> <p>S20 - Relationship between structure and function of the liver.</p> <p>C20 - Gastro-intestinal system, part 3.</p> <p>S21 - Upper and distal respiratory tract.</p> <p>C21 - Respiratory system.</p> <p>S22 - Relationship between nephrons and blood vessels.</p> <p>C22 - Urinary system.</p> <p>S23 - Structure and function of skin, development of the mammary gland.</p> <p>C23 - Skin & its appendages, mammary gland.</p> <p>S24 - Structure of the eye, function of the retina.</p> <p>C24 - Nervous system.</p> <p>S25 - Retake of the weekly tests. Students credit of the practical classes before Intermediate Examination.</p> <p>C25 - Demonstration of histological slides before the intermediate examination – Embryology and Microscopic anatomy.</p> <p>S26 - Demonstration of histological slides before the intermediate examination</p> <p>C26 - Demonstration of histological slides before the intermediate examination – Embryology and Microscopic anatomy.</p>	
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	<p><i>S27 - Demonstration of histological slides before Final Examination of the Histology and Embryology. C27 – Slide practice before Final Examination of the Histology and Embryology.</i></p> <p><i>S28 - Demonstration of histological slides before Final Examination of the Histology and Embryology. C28 – Slide practice before Final Examination of the Histology and Embryology.</i></p> <p><i>S29 - Demonstration of histological slides before Final Examination of the Histology and Embryology. C29 – Slide practice before Final Examination of the Histology and Embryology.</i></p> <p><i>S30 - Demonstration of histological slides before Final Examination of the Histology and Embryology. C30 – Slide practice before Final Examination of the Histology and Embryology.</i></p>	
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7. LITERATURE	
Obligatory	
<ol style="list-style-type: none"> Gartner L. P., "Textbook of Histology", Elsevier, last edition. Sadler T. W. "Langman's Medical Embryology", 2015, Wolters Kluwer Health, thirteenth edition. Daniel J. Chiego, Jr.: "Essentials of Oral Histology and Embryology": A Clinical Approach, Elsevier 4th edition, 2014 	
Supplementary	
<ol style="list-style-type: none"> Stevens A., Lowe J. "Human Histology" 2005, Elsevier Mosby, third ed. Ross M.H., Pawlina W. "Histology: A text and atlas", 2011, Lippincott Williams & Wilkins, sixth ed. Schoenwolf, Bleyl, Brauer, Francis-West "Larsen's Human Embryology" 5th Ed. Nanci A. "Ten Cate's - Oral Histology", 2008, Elsevier, seventh edition or newer 	

8. VERIFYING THE EFFECT OF LEARNING		
Code of the course effect of learning	Ways of verifying the effect of learning	Completion criterion
G.K1, G.K2, G.K3, G.K4, G.K5, G.K6	weekly quiz, intermediate examination, final examination	minimum 60 % of good answers in total

G.S1 G.S2	practical class – notebook drawings, practical intermediate examination, practical final examination	credit from the teacher; minimum 60 % of good answers in total in practical intermediate and final examinations
G.S3	weekly quiz, intermediate examination, final examination	minimum 60 % of good answers in total

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

1. The student research club is supervised by Izabela Młynarczuk-Biały, M.D, Ph.D. and Ryszard Galus, M.D. Ph.D., Associate professor <http://histologia.wum.edu.pl> - Studenckie Koło Naukowe
2. The student research club is supervised by Małgorzata Lewandowska-Szumieł, Ph.D., Professor mszumiel@wum.edu.pl
3. The student research club NEMO is supervised by Jarosław Józwiak, M.D., Ph.D., Associate professor <http://histologia.wum.edu.pl> - Studenckie Koło Naukowe NEMO

General regulations - Histology and Embryology for medical students 6ED 2020/2021

Organization of classes and seminars

1. Histology and Embryology is taught during lectures, seminars and practical classes.
2. Presence in lectures, seminars and practical classes is obligatory. Coming late to class by more than 15 minutes will be treated as an absence.
3. Classes begin with the seminar followed by a practical part.
4. Students have to be prepared for the class. Tutor will verify student's preparation to the class. Subject of seminars and classes are specified in the Topics of classes and lectures.
5. Proper preparation to the seminar and class is evaluated by the introductory knowledge test (weekly quiz).
6. During the class, students discuss with their professor topics of the class and inspect microscopic slides, schemes and electronograms. Images of tissues and organs inspected under the microscope should be drawn with color crayons in the notebook. All drawings have to be properly described (legend to the drawing).
7. Microscopes are provided for every student in the class. At the end of the class student should switch off the microscope and cover it. Microscopic slides, electronograms, microscopes or their parts must not be removed from the class.
8. During the period preceding intermediate or final examinations, every student group can borrow a set of demonstration slides for an at-home training. Sets can be exchanged any number of times. Before exchanging or returning the set, students have to put slides in order, according to the attached list. Students are financially liable for lost or damaged slides.

Presence in the classes and seminars

1. To get the credit for the semester Student must be present in lectures and seminars and get credit in all classes.
2. The prerequisite for getting a credit for the class is a positive note received on the knowledge of the discussed subject and properly done drawings of microscopic slides.
3. Days of classes, including days of intermediate examinations, are days of obligatory presence.
4. It is permitted to be absent up to 2 times during lectures and 2 times during classes in each semester. Absence must be justified with the tutor. Absence on 3 or more classes, regardless of the reason, results

in not getting a credit for the semester, hence student will not be admitted to the intermediate examination.

When students are absent, they are expected to negotiate with professors the form for make-up of lectures, seminars or classes missed.

Student is obliged to make up for missed class.

5. Classes uncredited because of an absence or being unprepared must be passed in the form established by the Head of the Department. Head of the Department will appoint the date of this test.

Credit for classes – weekly tests.

1. In order to get a credit for classes, the student must get at least 60% of the total number of points from all weekly tests, from the given part (general histology, embryology, microscopic anatomy).
2. If the student did not achieve 60%, she/he must get credit for all the tests for the classes for which he did not get 6 points. Not getting the minimum of 60% from all the retaken tests, results in not being admitted to the intermediate/final exam.
3. All tests needs to be retaken before intermediate examinations.

Credit

1. Dates of the intermediate examinations are decided by the university Pedagogical Council and cannot be changed.
2. Only students who were present in lectures, seminars and got credit for all the classes are admitted to the intermediate examination.
3. Intermediate examination in general histology and in microscopic anatomy consist of two parts: practical (slide recognition) and theoretical.
4. Intermediate examination in embryology has no practical part.
5. Intermediate examinations on the first and the second date are MCQ tests. Other dates of the intermediate examination have the form that is determined by the Head of the Department.
6. Intermediate examination tests consist of 50 multiple choice questions with more than one answer correct. The duration of intermediate examination is 38 minutes.
7. The criteria to pass the test are determined by the Head of the Department, after the test, and they are expected to be not less than:
 - 60% of all questions in the test.
8. **Chair and Department of Histology and Embryology informs that according to the Regulations of Written Exams of WUM (art. 16) students may raise reservations to examination questions, directly after the end of the exam, not later than after leaving the examination hall. Reservations in written form should be handed to the members of examination commission.**
9. The Department appoints two dates of each intermediate examination.
10. Intermediate practical part must be passed before the date of the retake MCQ test. Students who failed practical part of any intermediate examination before the date of the retake examination will not qualify for the retake and last retake of MCQ test.
11. Students have only 3 days after the publication of results to check their question and answer card. Only students who missed 2 points are allowed to check their question and answer card.

Final examination

1. The final examination comprises topics discussed during classes, seminars and lectures.
2. Student must pass all intermediate examinations scheduled in the program of the course to be admitted to the final examination.
3. Dates of the final examinations are decided by the university Pedagogical Council and cannot be changed.
4. Final examination consists of two parts: practical and theoretical.
5. Failing practical or theoretical part results in failing the examination.
6. **Head of the Department can exempt a student from the THEORETICAL final examination, when the average of all students' marks received on intermediate examinations was at least 4½. Student IS NOT exempted from PRACTICAL examination. For such exemption student needs to apply to the Head of the Department in writing (template of the application is available on the Department web site).**
7. In the case of an absence during the final examination caused by medical condition, should present doctor's leave during three working days from the date of examination, or will receive a failing mark.

8. Retake of the examination is held during the retake examination session. If the student fails this examination, he/she can apply to the Dean for the permission for the second retake of the examination.

Practical examination

1. Practical part of the examination consists of recognizing 10 histological slides. Minimal number of recognized slides is 6. For each additionally recognized slide, the student receives 1 point, and for recognizing 10 slides - 5 points.
2. Students who failed practical examination on the first date will take the MCQ test, whose positive result will be treated as the result of retake examination (student has to take again only practical examination).
3. Students who passed practical examination on the first date, but failed the MCQ test, do not have to take the practical examination once again during the retake (student has to take again only MCQ test).

Theoretical examination

1. Theoretical part of the examination is the MCQ test that consists of 100 multiple choice questions with more than one answer correct. The duration of intermediate examination is 75 minutes.
2. Examination test contains questions on topics discussed in the course.
3. The criteria to pass the test are determined by the Head of the Department, after the test, and they are expected to be not less than:
 - 60% of questions in the remaining part of the test.
 - **Chair and Department of Histology and Embryology informs that according to the Regulations of Written Exams of WUM (art. 16) students may raise reservations to examination questions, directly after the end of the exam, not later than after leaving the examination hall. Reservations in written form should be handed to the members of examination commission.**

Final grade

1. Final mark is set on the basis of both: practical and theoretical examination. Points received on both parts of the examination are considered.
2. Points from the practical examination are added to the points received on the MCQ test only to students, who had passed the MCQ test.
3. Points from the practical examination are added only once. These points are not added in examinations conducted during the retake session.

Position of the Chair regarding cheating during examinations

Cheating on examinations is a breach of ethics and Regulations of Studies at the Warsaw Medical University. Person actively or passively participating in cheating shall be punished by being expelled from the examination and receiving a failing mark. On the top of that, the Department shall institute disciplinary procedure against the cheating students.

Person actively participating in cheating is the one, **who copies results from other students or uses illegal notes or electronic devices to communicate or store data. Bringing such devices to examinations is forbidden.**

Passive participation in cheating means allowing other students copy one's own responses. Thus, a student is obliged to behave honestly, not to allow other students copy his/her own responses.

Head of the Department obliges students and examiners to strictly obey these regulations.



BIOPHYSICS

1. IMPRINT	
Academic Year	2020/2021
Department	English Division, Faculty of Medicine
Field of study	Course Medicine
Main scientific discipline <i>(in accord with appendix to the Regulation of Minister of Science and Higher Education from 26th of July 2019)</i>	Medical Sciences
Study Profile <i>(general academic / practical)</i>	General academic
Level of studies <i>(1st level /2nd level/ uniform MSc)</i>	Uniform MSc
Form of studies	Full-time studies
Type of module / course <i>(obligatory / non-compulsory)</i>	obligatory
Form of verification of learning outcomes <i>(exam / completion)</i>	completion (credit)
Educational Unit / Educational Units <i>(and address / addresses of unit / units)</i>	Department of Biophysics and Human Physiology Faculty of Health Sciences, Medical University of Warsaw, 5 Chałubińskiego Str., 02-004 Warsaw phone: +48 22 6286334

	phone/fax: +48 22 6287846
Head of Educational Unit / Heads of Educational Units	Prof. dr hab. Jacek Przybylski
Course coordinator (<i>title, First Name, Last Name, contact</i>)	Piotr Jeleń, MSc, PhD e-mail: piotr.jelen@wum.edu.pl phone: +48 22 6286334
Person responsible for syllabus (<i>First name, Last Name and contact for the person to whom any objections concerning syllabus should be reported</i>)	Piotr Jeleń, MSc, PhD e-mail: piotr.jelen@wum.edu.pl phone: +48 22 6286334
Teachers	Małgorzata Witkowska-Zimny MSc, PhD, DSc Maria Sobol, MSc, PhD Agnieszka Malinowska, MSc, PhD Piotr Mrówka, MSc, PhD Maciej Pylak, MSc, PhD Tomasz Siedlecki, MSc Piotr Jeleń, MSc, PhD

2. BASIC INFORMATION			
Year and semester of studies	first year/ second semester	Number of ECTS credits	3.00
FORMS OF CLASSES		Number of hours	ECTS credits calculation
Contacting hours with academic teacher			
Lecture (L)	4	0,16	
Seminar (S)	15	0,60	
Discussions (D)			
e-learning (e-L)			
Practical classes (PC)	15	0,60	
Work placement (WP)			
Unassisted student's work			
Preparation for classes and completions	41	1,64	

3. COURSE OBJECTIVES	
O1	Physics of human body
O2	Impact of physical factors on human body
O3	Physical bases of chosen imaging and therapeutic techniques in medicine

4. STANDARDS OF LEARNING – DETAILED DESCRIPTION OF EFFECTS OF LEARNING <i>(concerns fields of study regulated by the Regulation of Minister of Science and Higher Education from 26 of July 2019; does not apply to other fields of study)</i>	
Code and number of effect of learning in accordance with standards of learning <i>(in accordance with appendix to the Regulation of Minister of Science and Higher Education from 26th of July 2019)</i>	Effects in time
Knowledge – Graduate* knows and understands:	
B.W5	The laws of physics referring to fluid flow and the determinants of resistance to blood flow within a single vessel
B.W6	The natural and artificial sources of ionizing radiation and the mechanisms of interaction of ionizing radiation with matter
B.W7	The physicochemical and molecular bases of sight and hearing
B.W8	The physical bases of non-invasive imaging techniques
B.W9	The physical bases of selected therapeutic techniques including ultrasound and irradiations
Skills– Graduate* is able to:	
B.U1	apply physical phenomena to explain the effects of external factors like temperature, pressure, electromagnetic field, and ionizing radiation on human organism
B.U2	assess health effects of absorption of a given dose of ionizing radiation
B.U9	operate the simple measurement devices and to assess measurements precision

* 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 <i>(non-compulsory)</i>
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Number of effect of learning	Effects of learning in time
Knowledge – Graduate knows and understands:	
B.W3	concepts: osmotic pressure, isotony, Gibbs -Donnan equilibrium
Skills– Graduate is able to:	
S1	communicate with colleagues in the team and share knowledge
Social Competencies – Graduate is ready for:	
SC1	formulating conclusions from their own measurements or observations

6. CLASSES		
Form of class	Class contents	Effects of Learning
Lecture L1	X rays and nuclear radiation – introduction.	B.W6, B.U1
Lecture L2	Therapeutic techniques. Radiation protection.	B.W6, B.W9, B.U2
Seminar S1	Introduction to thermodynamics. Biological membranes (passive and active transport across a cell membrane, resting membrane potential, action potential, Gibbs-Donnan equilibrium in red blood cells).	B.W3
Seminar S2	Biophysics of circulation (basic physical laws of fluid flow, types of fluids in fluid mechanics, laminar, turbulent and pulsatile flow, blood circulation system, physical properties of blood and blood vessels).	B.W5
Seminar S3	Heart electrical activity (genesis of ECG, heart axis).	B.U9
Seminar S4	Respiratory biophysics (structure of the lungs, the physics of the alveoli, mechanics of breathing, respiratory cycle, gas flow in airways, pulmonary volumes and capacities, partial pressures of gases). Spirometry. Respiration under usual and unusual conditions.	B.W5, B.U1, B.U9
Seminar S5	Imaging techniques in medicine (CT, PET, SPECT, MRI).	B.W8
Practical class PC1	Sound waves. Physical bases of hearing. Audiometry screening and interpretation.	B.W7, B.U1, B.U9, S1, SC1
Practical class PC2	Physical basics of ultrasonography.	B.W8, B.U1, B.U9, S1, SC1
Practical class PC3	Doppler ultrasonography. Blood flow characteristics in arteries.	B.W5, B.U1, B.W8, B.U9, S1, SC1

Practical class PC4	Biophysics of vision (imaging and detection by the eye, vision impairments).	B.W7, B.U9, S1, SC1
Practical class PC5	X rays – measurements and interpretation (X ray tube, continuous and linear spectra, interaction of X rays with a matter, law of attenuation). Analysis of X-ray images.	B.W6, B.W9, B.U1, BU2, B.U9, S1, SC1

7. LITERATURE
Obligatory
<ol style="list-style-type: none"> 1. Daviodovits P.: Physics in Biology and Medicine (4th ed.), Academic Press, 2012. 2. Herman I.P.: Physics of the Human Body, Springer, Berlin-Heidelberg-New York, 2016. 3. Ronto G., Tarjan I. (Eds.): An Introduction to Biophysics with Medical Orientation, (3rd ed.), Akadémiai Publishing Company, Budapest, 1999.
Supplementary
<ol style="list-style-type: none"> 1. Glaser, R.: Biophysics, Springer-Verlag 2005. 2. Hobbie R.K., Roth B.J.: Intermediate Physics for Medicine & Biology (5-th ed.), Springer, 2015. 3. Malmivuo J., Plonsey R.: Bioelectromagnetism, - Principles and Applications of Bioelectric and Biomagnetic Fields. New York, Oxford University Press, 1995.

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>
B.W5	Quiz, written report, final test	To be admitted to the final test students are obliged to fulfil the following conditions: - attend all seminars and practical classes (*) - pass all of the quizzes on the e – learning platform (1 quiz per one lecture or seminar; to pass the quiz, student has to answer correctly at least 60% of the questions), - submit on the e-learning platform 5 experimental reports and collect at least 15
B.W6	Quiz, written report, final test	
B.W7	Quiz, written report, final test	
B.W8	Quiz, written report, final test	
B.W9	Quiz, written report, final test	

B.U1	Quiz, written report, final test	<p>points (one experimental report would be assessed for maximum 5 points).</p> <p>In case of plagiarism (a student submits for assessment a report of the other student as their own) the appropriate information will be provided to the Deans Office, and the student may not be admitted to the final test.</p> <p>In order to pass the final test, student has to answer correctly at least 60% of the questions.</p> <p>(*) in pandemic situation the relevant quizzes solved by the students on the e-learning platform and written experimental reports (based on the data provided by teachers) submitted on the e-learning platform for assessment will be considered as confirmation of attendance.</p>
B.U2	Quiz, written report, final test	
B.U10	Quiz, written report, final test	

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

The detailed information for students will be available one month before the beginning of the course on the website of the Department of Biophysics and Human Physiology:

<https://biofizyka.wum.edu.pl/content/wl-english-division>

Students achievements are graded based on the final test results.

grade	criteria
2.0 (failed)	0-35 correct answers
3.0 (satisfactory)	36-40 correct answers
3.5 (rather good)	41-45 correct answers
4.0 (good)	46-50 correct answers
4.5 (more than good)	51-55 correct answers
5.0 (very good)	56-60 correct answers



History of Medicine

10. IMPRINT	
Academic Year	2020/2021
Department	Faculty of Medicine
Field of study	English Division
Main scientific discipline <i>(in accord with appendix to the Regulation of Minister of Science and Higher education from 26th of July 2019)</i>	Medical sciences
Study Profile <i>(general academic / practical)</i>	Practical
Level of studies <i>(1st level /2nd level/ uniform MSc)</i>	Uniform MSc
Form of studies	Full time
Type of module / course <i>(obligatory / non-compulsory)</i>	Obligatory
Form of verification of learning outcomes <i>(exam / completion)</i>	Completion for grade
Educational Unit / Educational Units <i>(and address / addresses of unit / units)</i>	Department of History of Medicine 00-575 Warsaw Litewska 16 Str., room 207 22 116 92 60

	e-mail: historia-medycyny@wum.edu.pl www.historiamedycyny.wum.edu.pl
Head of Educational Unit / Heads of Educational Units	Ewa Skrzypek, MD, PhD
Course coordinator <i>(title, First Name, Last Name, contact)</i>	Ewa Skrzypek, MD, PhD ewa.skrzypek@wum.edu.pl
Person responsible for syllabus <i>(First name, Last Name and contact for the person to whom any objections concerning syllabus should be reported)</i>	Ewa Skrzypek, MD, PhD ewa.skrzypek@wum.edu.pl
Teachers	Ewa Skrzypek, MD, PhD

11. BASIC INFORMATION			
Year and semester of studies	1 st year, 2 nd semester	Number of ECTS credits	1
FORMS OF CLASSES		Number of hours	ECTS credits calculation
Contacting hours with academic teacher			
Lecture (L)		-	-
Seminar (S)		30	0.75
Discussions (D)		-	-
e-learning (e-L)		-	-
Practical classes (PC)		-	-
Work placement (WP)		-	-
Unassisted student's work			
Preparation for classes and completions		10	0.25

12. COURSE OBJECTIVES

O1	Acquaintance with the development of medical sciences in the world and in Poland throughout history.
O2	Acquaintance with major medical discoveries and outstanding people in the history of medicine.
O3	Acquaintance with the history of selected medical equipment and hospital systems in Poland and in the world.
O4	Acquaintance with the history of selected diseases, <i>most famous patients</i> included.
O5	Presentation of the most important aspects of the history of medicine teaching in Poland and in the world.

13. 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)*

<p>Code and number of effect of learning in accordance with standards of learning <i>(in accordance with appendix to the Regulation of Minister of Science and Higher education from 26th of July 2019)</i></p>	<p>1. GENERAL LEARNING EFFECTS</p> <p>1.1. In the field of knowledge, the graduate knows and understands:</p> <ol style="list-style-type: none"> 1) methods of conducting scientific research. <p>1.2. In the field of skills, the graduate is able to:</p> <ol style="list-style-type: none"> 1) plan their own educational activity and expand their knowledge on an ongoing basis with the purpose of keeping up-to-date; 2) inspire the process of learning in other people; 3) critically evaluate research works findings and adequately justify their position. <p>1.3. In the field of social competence, the graduate is ready to:</p> <ol style="list-style-type: none"> 1) discern and recognize their own limitations, perform self-assessment of educational deficits and needs; 2) make use of objective sources of information; 3) formulate opinions concerning different aspects of professional activity.
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Knowledge – Graduate* knows and understands:

D.W20	history of medicine, medicine of primitive peoples and old civilizations as well as characteristic features of medieval medicine
D.W21	features of modern times medicine and its major discoveries
D.W22	process of the development of new specialties in the field of scientific discipline – medical sciences and achievements of leading representatives of Polish and world medicine

Skills– Graduate* is able to:

D.U16	show responsibility for raising their own qualifications and transferring knowledge to others
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** In appendix to the Regulation of Minister of Science and Higher Education from 26th of July 2019 „graduate”, not student is mentioned.*

14. CLASSES		
Form of class	Class contents	Effects of Learning
Seminars	S1 – Seminar 1 – Why medical history?	D.W20, D.W21, D.W22 i D.U16
	S2 – Seminar 2 – Hippocrates – father of medicine	
	S3 – Seminar 3 – Outline of the history of anatomy and pathological anatomy / / pathomorphology	
	S4 - Seminar 4 – Outline of the history of histology and physiology	
	S5 – Seminar 5 – Outline of the history of microbiology, immunology and genetics	
	S6 – Seminar 6 – Outline of the history of surgery and internal medicine	
	S7 – Seminar 7 – Outline of the history of gynaecology, obstetrics and paediatrics	
	S8 – Seminar 8 – Outline of the history of neurology, neurosurgery and psychiatry	
	S9 – Seminar 9 – Who named it? The few medical eponyms among Polish women	
	S10 – Seminar 10 – Chronology of medical history. Summary of the course	
	S11 – Seminar 11 – Final test	

15. LITERATURE
Obligatory
1. All obligatory reading materials will be provided by the lecturer in .pdf files.
Supplementary
2. Ackerknecht E. H.: <i>A Short History of Medicine</i> , The Johns Hopkins University Press, Baltimore and London 1982.
3. Bynum W., Bynum H. (eds.): <i>Great Discoveries in Medicine</i> , Thames & Hudson, London 2011.
4. Hager Th.: <i>Ten Drugs. How Plants, Powders and Pills Have Shaped the History of Medicine</i> , Abrams Press, New York 2019.
5. Harper P. S.: <i>A Short History of Medical Genetics</i> , Oxford University Press, Oxford 2008.
6. Jauhar S.: <i>Heart. A History</i> , Oneworld, London 2019.
7. Jewell H.: <i>100 Nasty Women of History</i> , Hodder Stoughton, London 2017.
8. Lieberman J. A., Ogas O.: <i>Shrinks. The Untold History of Psychiatry</i> , Weidenfeld Nicolson, London 2016.
9. Mukherjee S.: <i>The Emperor of All Maladies. A Biography of Cancer</i> , Fourth Estate, London 2011.

10. Mukherjee S.: *The Gene. An Intimate History*, Vintage, London 2017.
11. Nuland Sh. B.: *Doctors. The Illustrated History of Medical Pioneers*, New York 2008.
12. Oldstone M. B. A.: *Viruses, Plagues and History. Past, Present and Future*, Oxford University Press, Oxford 2010.
13. Porter R. (ed.): *Cambridge Illustrated History. Medicine*, Cambridge University Press, Cambridge 2001.
14. Ribatti D.: *Milestones in Immunology. Based on Collected Papers*, Academic Press, Elsevier, London 2017.
15. Siemionow M.: *Face to Face. A Short History of Face Transplantation*, Springer, Chicago 2019.
16. Skrzypek E.: *Portraits of the Honorary Doctors*, Medical University of Warsaw, Warsaw 2016.
17. Spearing S.: *A History of Women in Medicine. Cunning Women, Physicians, Witches*, Pen & Sword Books Ltd, Yorkshire – Philadelphia 2019.
18. Strathern P.: *A Brief History of Medicine from Hippocrates to Gene Therapy*, Robinson, London 2005.
19. Wadman M.: *The Vaccine Race. How Scientists Used Human Cells to Combat Killer Viruses*, Black Swan, London 2018.
20. Youngson R., Schott I.: *A Brief History of Bad Medicine. True stories of weird medicine and dangerous doctors*, Robinson 2012.

16. VERIFYING THE EFFECT OF LEARNING

Code of the course effect of learning	Ways of verifying the effect of learning	Completion criterion
D.W20, D.W21, D.W22 i D.U16	Continuos assessment in the course of classes	<p>Form of receiving credit – COMPLETION FOR GRADE</p> <p>Final, single-choice test; active participation in classes; attendance (maximum 2 absences)</p> <p>2.0 (failed) - ≤ 50% 3.0 (satisfactory) – 51-60% 3.5 (rather good) – 61-70% 4.0 (good) – 71-80% 4.5 (more than good) – 81-90% 5.0 (very good) – 91-100%</p>

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

1. Classes are held according to the time-table provided by the Dean's Office.
2. The use of mobile phones and other recording equipment is forbidden.
3. Students cannot be late for classes.



LATIN IN MEDICINE

18. IMPRINT	
Academic Year	2020/2021
Department	English Division
Field of study	Medical program
Main scientific discipline <i>(in accord with appendix to the Regulation of Minister of Science and Higher education from 26th of July 2019)</i>	Medical sciences
Study Profile <i>(general academic / practical)</i>	General academic
Level of studies <i>(1st level / 2nd level / uniform MSc)</i>	Uniform MSc
Form of studies	Full-time 6-year programme
Type of module / course <i>(obligatory / non-compulsory)</i>	Obligatory course
Form of verification of learning outcomes <i>(exam / completion)</i>	Completion

Educational Unit / Educational Units (<i>and address / addresses of unit / units</i>)	Foreign Language Department The Didactic Center, 2a, Trojdena St., 02-109 Warsaw sjosekretariat@wum.edu.pl , tel. 22 5720863 www.sjo.wum.edu.pl
Head of Educational Unit / Heads of Educational Units	Maciej Ganczar, PhD
Course coordinator (<i>title, First Name, Last Name, contact</i>)	Beata Olędzka, MA beata.oledzka@wum.edu.pl
Person responsible for syllabus (<i>First name, Last Name and contact for the person to whom any objections concerning syllabus should be reported</i>)	Beata Olędzka, MA beata.oledzka@wum.edu.pl
Teachers	Beata Olędzka, MA beata.oledzka@wum.edu.pl tel. 22 5720858

19. BASIC INFORMATION			
Year and semester of studies	1 st year 1 st or 2 nd semester	Number of ECTS credits	1
FORMS OF CLASSES		Number of hours	ECTS credits calculation
Contacting hours with academic teacher			
Lecture (L)		-	-
Seminar (S)		-	-
Discussions (D)		-	-
e-learning (e-L)		-	-
Practical classes (PC)		20	0,50
Work placement (WP)		-	-
Unassisted student's work			

Preparation for classes and completions	20	0,50
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20. COURSE OBJECTIVES	
O1	The student should be able to recognise and use Latin and Greek medical terms.
O2	The student should be able to make plural forms of Latin nouns.
O3	The student should be able to recognise and use Latin and Greek prefixes and suffixes
O4	The student should be able to recognise and use basic medical abbreviations.

21. 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 (<i>in accordance with appendix to the Regulation of Minister of Science and Higher education from 26th of July 2019</i>)	D.W6. D.U17.
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Knowledge – Graduate* knows and understands:

D.W6.	the significance of verbal and non-verbal communication in the process of communicating with the patient and the notion of trust in the interaction with the patient.
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Skills– Graduate* is able to:

D.U17.	critically analyse literature (including literature in English) and is able to draw conclusions.
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* *In appendix to the Regulation of Minister of Science and Higher education from 26th of July 2019 „graduate”, not student is mentioned.*

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

Number of effect of learning	Effects of learning i time
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Knowledge – Graduate knows and understands:

K1	Latin and Greek medical terms.
K2	Latin phrases and abbreviations used in medical and pharmaceutical terminology.
Skills– Graduate is able to:	
S1	use Latin and Greek medical terms.
S2	use Latin phrases and abbreviations used in medical and pharmaceutical terminology.
Social Competencies – Graduate is ready for:	
SC1	continually broadening their knowledge.

23. CLASSES		
Form of class	Class contents	Effects of Learning
Classes	<p>C1 Discussing the syllabus (the course content, learning outcomes and the methods of their verification; rules and regulations; credit receiving criteria). A brief history of Latin and an introduction to the language.</p> <p>C2 Latin nouns and adjectives and their basic forms. Grammatical gender. The human skeleton K1</p> <p>C3 Plural forms of Latin nouns.</p> <p>C4 Latin adjectives. Anatomical plans and directions.</p> <p>C5 Forms and functions of the possessive/genitive case. The human body.</p> <p>C6 Greek alphabet. Greek and Latin words present in European languages and medicine.</p> <p>C7 Basic word structure. The most popular suffixes - their origin and meanings. The names of inflammatory conditions and tumours.</p> <p>C8 Prepositions. Common prepositional phrases. Greek and Latin prefixes.</p> <p>C9 Elements of pharmacology. Prescription. Common abbreviations.</p> <p>C10 The final test.</p>	<p>D</p> <p>.</p> <p>W</p> <p>6</p> <p>.</p> <p>D</p> <p>.</p> <p>U</p> <p>1</p> <p>7</p> <p>.</p> <p>,</p> <p>K</p> <p>1</p> <p>,</p> <p>K</p> <p>2</p> <p>,</p> <p>S</p> <p>1</p> <p>,</p> <p>S</p> <p>2</p> <p>,</p> <p>S</p> <p>C</p> <p>1</p>

24. LITERATURE

Obligatory

Handouts prepared by the teacher.

Supplementary

Ołędzka Beata: *Latin in Medicine. Course for medical students.* Warszawa: Oficyna Wydawnicza WUM 2013.

Concise Colour Medical Dictionary. Oxford University Press 2007.

25. VERIFYING THE EFFECT OF LEARNING

Code of the course effect of learning	Ways of verifying the effect of learning	Completion criterion
G.K1, G.S1, K1, K2, S1, S2, SC1	Final written test.	2.0 (failed) below 60% 3.0 (satisfactory) 60%-69,99% 3.5 (rather good) 70%-79,99% 4.0 (good) 80%-85,99% 4.5 (more than good) 86%-90,99% 5.0 (very good) 91%-100%

26. 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)

Credit receiving criteria:

1. To successfully complete the Latin in medicine course, each student needs to obtain a credit. To obtain a credit, a student is required to:

- **attend all classes** – each student is allowed to miss two classes without having to give an excuse.

A student who misses more than 2 classes will not be allowed to take the course test at the end of the academic year and will not receive course credits.

Absences due to illness will be excused on presentation of a valid medical note within one week after returning to class. In the case of two or more excused absences per semester the student must make up the missed classes. **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 late three (3) times, it will constitute one absence (the teacher takes attendance at the very beginning of the class) it is the student's responsibility to ask the teacher to clear the absence off the student's record break just after the class.

If a student is 15 or more minutes late, it will constitute one absence.

- **have the handouts prepared by the teacher in each class**
 - **actively participate in each class**
 - **complete all the assignments by the due date**
 - **pass the final course test at the end of the semester**
2. A student who fails the course test can sit a retake test twice. The first retake is held at least a week after the first attempt, the second and FINAL retake a week after the first retake or in the retake examination period. The final course grade which student receives is the score of the course test (Grade: 2 (fail) / 3 / 3.5 / 4 / 4.5 / 5 (very good), or a grade 3 (satisfactory) for passing a retake test.
A student who misses a scheduled test will not receive credit unless she/he presents a valid medical note within three days of the scheduled test date and makes up the missed test at the date set by the class teacher.
A student who fails the second retake needs to repeat the course.
3. If classes are moved online, they will take place according to a previously agreed schedule in the form of video meetings. It is obligatory that both the instructor and the students have their web cameras on. Having the camera off will count as an absence from class.



POLISH LANGUAGE

27. IMPRINT	
Academic Year	2020/2021
Department	English Division
Field of study	Medicine
Main scientific discipline <i>(in accord with appendix to the Regulation of Minister of Science and Higher education from 26th of July 2019)</i>	medical sciences
Study Profile <i>(general academic / practical)</i>	General academic
Level of studies <i>(1st level /2nd level/ uniform MSc)</i>	Uniform MSc
Form of studies	Full-time
Type of module / course <i>(obligatory / non-compulsory)</i>	Obligatory
Form of verification of learning outcomes <i>(exam / completion)</i>	Completion
Educational Unit / Educational Units <i>(and address / addresses of unit / units)</i>	The Centre for Foreign Languages Medical University of Warsaw ul. Trojdena 2a., 02-109 Warsaw sjosekretariat@wum.edu.pl, tel. 22 5720863

	www.sjo.wum.edu.pl/
Head of Educational Unit / Heads of Educational Units	Maciej Ganczar, PhD
Course coordinator <i>(title, First Name, Last Name, contact)</i>	Anna Maczkowska, MA amaczkowska@wum.edu.pl
Person responsible for syllabus <i>(First name, Last Name and contact for the person to whom any objections concerning syllabus should be reported)</i>	Anna Maczkowska, MA amaczkowska@wum.edu.pl
Teachers	Maciej Ganczar, PhD Beata Olędzka, MA

28. BASIC INFORMATION			
Year and semester of studies	1 st , semester 1-2	Number of ECTS credits	5.00
FORMS OF CLASSES		Number of hours	ECTS credits calculation
Contacting hours with academic teacher			
Lecture (L)			
Seminar (S)			
Discussions (D)		80	3
e-learning (e-L)			
Practical classes (PC)			
Work placement (WP)			
Unassisted student's work			
Preparation for classes and completions		160	2

29. COURSE OBJECTIVES

01	The aim of the 1 st year Polish language course is to introduce Polish letters, sounds and basic language structures as well as vocabulary that will provide the students with foundations on which the II year basic medical Polish language competencies can be built.
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30. 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 <i>(in accordance with appendix to the Regulation of Minister of Science and Higher Education from 26th of July 2019)</i>	Effects in time
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Knowledge – Graduate* knows and understands:

Skills– Graduate* is able to:

D.U18	communicate with the patient in one of the foreign languages at level B2+ of the Common European Framework of Reference
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** In appendix to the Regulation of Minister of Science and Higher education from 26th of July 2019 „graduate”, not student is mentioned.*

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

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

K1	
K2	

Skills– Graduate is able to:

S1	recognise and write printed and handwritten letters in Polish; recognise and pronounce Polish sounds;
S2	inform and inquire about name, age, nationality, marital status, family members, occupation, place of residence, living conditions in Polish

S3	describe and inquire about daily activities and past events in Polish
S4	use selected expressions referring to time, place and quantity in Polish

Social Competencies – Graduate is ready for:

SC1	
SC2	

6. CLASSES

Form of class	Class contents	Effects of Learning
Discussions	<p><i>Class duration: 2 hours 15 minutes (winter term) and 1 hour 45 minutes (summer term)</i></p> <p>C1 Discussing the syllabus (the course content, learning outcomes and the methods of their verification; rules and regulations; credit receiving criteria)</p> <p>The Polish alphabet and sounds • Some useful phrases.</p> <p>C2/3 Greetings and introductions • Cardinal numbers: 1-20 • Nouns: gender; the nominative singular • The demonstrative pronoun to + jest • Questions: kto?, co?, czy? • Pronunciation practice</p> <p>C4 Personal pronouns: the nominative singular • The formal and informal “you” • The verb być: present tense singular • Pronunciation practice</p> <p>C5 Adjectives: gender; the nominative singular • Questions: jaki?, -a?, -e? • The pronouns ten, ta, to • Cardinal numbers: 20-100 • Pronunciation practice</p> <p>C6 Nouns and adjectives: the nominative plural (masculine non-personal, feminine, neuter) • Cardinal numbers: 100-1000 • The prepositions w and na to describe location • Questions: gdzie? • Pronunciation practice</p> <p>C7/8 Possessive pronouns: the nominative singular • Questions: czyj/a/e? • Nouns and adjectives: the instrumental singular • Jobs • Nationalities • Countries • Questions: kim?, skąd? • Pronunciation practice</p> <p>C9/10 Nouns and adjectives: the accusative singular and plural • The verb proszę + the accusative • Foods and drinks • Nouns and adjectives: the instrumental singular and plural • The preposition z + the instrumental • Questions: z czym? • Pronunciation practice</p> <p>C11/12 Selected verbs followed by the accusative • Ordinal numbers: 1-12 • Telling the time • Questions: kogo?, co?, która (godzina)?, o której (godzinie)? • Pronunciation practice</p> <p>Progress test</p> <p>C13/14 Nouns and adjectives: the genitive singular and plural • Negative sentences • Questions: kogo?, czego? • Pronunciation practice</p>	D.U18, S1-S4

<p>C15/16 Verbs of motion: chodzić, iść, jechać • Means of transport • The prepositions do and na to describe direction • Questions: czym? • Pronunciation practice</p> <p>C17 Adverbs of frequency (e.g. zawsze, często, czasem) • The times of day (e.g. rano, wieczorem, w nocy) • Description of daily activities • Pronunciation practice</p> <p>C18 Days of the week • The school timetable • Pronunciation practice</p> <p>C19 The past tense singular • Expressions of time: wczoraj, w zeszłym tygodniu/miesiącu/roku, ... temu • Pronunciation practice</p> <p>C20 Family and hobbies • Pronunciation practice</p> <p>C21/22 Living conditions • Pronunciation practice</p> <p>C23 Uses of the genitive with numbers, containers, adverbs of quantity • Pronunciation practice</p> <p>C24/25 The verbs musieć and móc (the present tense) • Expressions of time: co tydzień/dwa miesiące/pięć lat, etc.; raz, dwa, etc. razy dziennie, w tygodniu/miesiącu/roku • Pronunciation practice</p> <p>C26 Time phrases with the preposition od (e.g. od dwóch godzin, od pięciu miesięcy, od roku) • Questions: od jak dawna/od kiedy? • Pronunciation practice</p> <p>C27 Course test revision</p> <p>C28 The course written test • Course test revision</p> <p>C29 Course revision • The course oral test</p> <p>C30 Course revision • The course oral test</p>	
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7. LITERATURE
Obligatory
The title of the textbook will be given at the first class meeting. 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.U18, S1-S4	Written test. Oral test.	To successfully complete the 1st year Polish language course and obtain credit, a student is required to: <ul style="list-style-type: none"> • <i>attend all classes</i> (min. 13 out of 15 in a semester) A student who misses more than 2 classes per semester

without a valid excuse will not be allowed to take the course tests and will not receive course credits.

Absences due to illness will be excused on presentation of a valid medical note within one week of return to study. In the case of two or more excused absences per semester the student must make up the missed classes. 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 test at the end of the 1st semester and the course written and oral tests (covering the coursework of both the winter and summer semesters) at the end of the 2nd semester*

A student who fails the course tests can take two resits.

The final course grade a student receives is the average (arithmetic mean) of the written and oral test grades (grades of 2-5), or a grade of 3 for passing a resit. A minimum score of 60% must be obtained on each (written and oral) test to pass the course.

A student who misses a scheduled test will receive a score of 0 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 second resit needs to repeat the course.

Students who are 'independent users' of the Polish language (Level B2 of CEFR) may be exempted from attending the first year Polish language course (and the second year Polish language course provided they achieve the required score) if they pass the B2 level examination administered by the University's Centre for Foreign Languages (Studium Języków Obcych) at the beginning of Year 1. Students interested in taking the exam should check with their class teacher for the exam date, time and location at the first class meeting.

The scale of grades is as follows:

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 (*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*)



Propaedeutics of molecular biology

32. IMPRINT	
Academic Year	2020/2021
Faculty	English Division
Field of study	Medicine
Main scientific discipline <i>(in accord with appendix to the Regulation of Minister of Science and Higher education from 26th of July 2019)</i>	Medical sciences
Study Profile <i>(general academic / practical)</i>	General academic
Level of studies <i>(1st level /2nd level/ uniform MSc)</i>	Uniform MSc
Form of studies	Stationary
Type of module / course <i>(obligatory / non-compulsory)</i>	Obligatory
Form of verification of learning outcomes <i>(exam / completion)</i>	Completion test
Educational Unit / Educational Units <i>(and address / addresses of unit / units)</i>	Department of General Biology and Parasitology, 5 Chałubińskiego Str., 02-004 Warsaw, tel. (22) 6212607, e-mail: biologia@wum.edu.pl

Head of Educational Unit / Heads of Educational Units	Ph.D., Associate Professor, Daniel Młocicki
Course coordinator <i>(title, First Name, Last Name, contact)</i>	Ph.D., Associate Professor, Monika Dybicz, monika.dybicz@wum.edu.pl
Person responsible for syllabus <i>(First name, Last Name and contact for the person to whom any objections concerning syllabus should be reported)</i>	Monika Dybicz, monika.dybicz@wum.edu.pl
Teachers	Monika Dybicz, Aleksandra Sędzikowska, Julia Dąbrowska, Agnieszka Sobczyk-Kopciół

33. BASIC INFORMATION			
Year and semester of studies	1 st year, 1st semester	Number of ECTS credits	2.00
FORMS OF CLASSES		Number of hours	ECTS credits calculation
Contacting hours with academic teacher			
Lecture (L)			
Seminar (S)		5	0.30
Discussions (D)			
e-learning (e-L)			
Practical classes (PC)		15	1.00
Work placement (WP)			
Unassisted student's work			
Preparation for classes and completions		10	0.70

34. COURSE OBJECTIVES	
O1	The objective is to provide knowledge which enable medical students to have a broad view of molecular biology.

O2	The subject focuses on broad base of knowledge about the genome, molecular mechanisms of cell processes and expression of genetic information in humans.
O3	The performance of fundamental molecular techniques.

35. 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 <i>(in accordance with appendix to the Regulation of Minister of Science and Higher education from 26th of July 2019)</i>	Effects in time
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Knowledge – Graduate* knows and understands:

B.W13	Nucleotide functions in the cell, primary and secondary DNA and RNA structures, and structure of chromatin.
B.W14	Functions of the genome, transcriptome and basic methods used in their study, processes of DNA replication, repair and recombination, transcription, translation and DNA, RNA degradation, and concepts of gene expression regulation.
C.W10	Benefits and risks considering GMO presence in ecosystem.

Skills– Graduate* is able to:

B.U8	Use basic techniques applied in molecular biology, e.g. PCR, RFLP, nucleic acids electrophoresis.
B.U9	Support simple measuring apparatus and assess the accuracy of measurements.
B.U13	Plan and perform simple scientific research and interpret their results and conclude.

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

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

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

K1	Fundamental molecular techniques.
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K2	The principles of conducting scientific, observational and experimental research and disseminating their results.
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Skills– Graduate is able to:

S1	Plan own educational activity and constantly improve education to update knowledge.
S2	Interpret the basic results of molecular studies and critically assesses their results in correlation with the possibility of a genetic disease in a patient.
S3	Communicate with colleagues in the team and share knowledge.

Social Competencies – Graduate is ready for:

SC1	Continuous improve education connected with the expansive molecular biology development.
SC2	Use of objective sources of information.
SC3	Formulation conclusions from own measurements or observations.

37. CLASSES		
Form of class	Class contents	Effects of Learning
Seminars	1. Human genome structure and function. 2. DNA and RNA structure and function. 3. DNA replication. 4. Transcription and translation, DNA repair and recombination, gene expression regulation. 5. Mutagenesis.	B.W13, B.W14
Practical classes	1. Basic rules of laboratory work. DNA extraction. 2. Continuation of DNA extraction. 3. <i>In vitro</i> DNA amplification (PCR and modifications). 4. RFLP and other molecular techniques. 5. Electrophoresis. 6. GMO (Genetically Modified Organisms). 7. Analysis of gene mutations determining the development.	B.W13, B.W14, C.W10

38. LITERATURE	
Obligatory	
1.	Workbook: Molecular Biology - materials for 1st year students of English Division Medicine. Monika Dybicz, Aleksandra Sędzikowska. Oficyna Wydawnicza WUM, Warszawa, 2020.
2.	Molecular Biology. Third Edition. David P. Clark, Nanette J. Pazdernik, Michelle R. McGehee. Elsevier, 2019.
Supplementary	
1.	Molecular Biology of the Gene. Seventh Edition. James. D. Watson, Tania A. Baker, Stephen P. Bell, Alexander Gann, Michael Levine, Richard Losick. Cold Spring Harbor Laboratory Press, 2013.

39. VERIFYING THE EFFECT OF LEARNING

Code of the course effect of learning	Ways of verifying the effect of learning	Completion criterion
<i>B.W13, B.W14, C.W10, B.U8, B.U9, B.U13</i>	Multiple Choice Questions test	Over 54% correct answers
<i>B.W13, B.W14, C.W10, B.U8, B.U9, B.U13</i>	Completion of individual exercises based on the reports of the exercises in the workbook.	Correct record of results obtained during exercises and their proper interpretation.

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

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



Library Training

41. IMPRINT	
Academic Year	2020/2021
Department	Faculty of Medicine
Field of study	English Division, 6-year program
Main scientific discipline <i>(in accord with appendix to the Regulation of Minister of Science and Higher education from 26th of July 2019)</i>	Medical science
Study Profile <i>(general academic / practical)</i>	General academic
Level of studies <i>(1st level /2nd level/ uniform MSc)</i>	1 level
Form of studies	stationary
Type of module / course <i>(obligatory / non-compulsory)</i>	obligatory
Form of verification of learning outcomes <i>(exam / completion)</i>	test
Educational Unit / Educational Units <i>(and address / addresses of unit / units)</i>	Main Library of the Medical University of Warsaw, Żwirki I Wigury 63, 02-091 Warszawa

Head of Educational Unit / Heads of Educational Units	mgr Irmina Utrata
Course coordinator <i>(title, First Name, Last Name, contact)</i>	mgr Irmina Utrata (22) 116 60 11, (22) 116 60 12 email: irmina.ustrata@wum.edu.pl
Person responsible for syllabus <i>(First name, Last Name and contact for the person to whom any objections concerning syllabus should be reported)</i>	mgr Irmina Utrata (22) 116 60 11, (22) 116 60 12 email: irmina.ustrata@wum.edu.pl
Teachers	e-learning

42. BASIC INFORMATION			
Year and semester of studies	Year I Semestr I	Number of ECTS credits	0.00
FORMS OF CLASSES		Number of hours	ECTS credits calculation
Contacting hours with academic teacher			
Lecture (L)			
Seminar (S)			
Discussions (D)			
e-learning (e-L)		2	
Practical classes (PC)			
Work placement (WP)			
Unassisted student's work			
Preparation for classes and completions			

43. COURSE OBJECTIVES	
O1	To prepare for independent and effective use of library services and resources
O2	To develop the skills of searching information about library resources by using library tools and resources

O3	To show the benefits of the use of library services and resources
O4	To show the benefits of the lifelong learning and professional development

44. 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 <i>(in accordance with appendix to the Regulation of Minister of Science and Higher education from 26th of July 2019)</i>	Effects in time
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Knowledge – Graduate* knows and understands:

G.K1	Students have the knowledge about organisational structure of the Medical University of Warsaw (MUW) library system; Knows rules for how the MUW library system works
G.K2	Students have the knowledge about print and electronic library resources
G.K3	Students have the knowledge about using the library card and online catalogs
G.K4	Students know the library website – the main source of knowledge about the library services, resources and regulations
G.K5	Students know about the most useful scientific libraries in Warsaw, including medical libraries

Skills– Graduate* is able to:

G.S1	Students identify their own information needs and knows how to meet them
G.S2	Students use resources and services offered by the MUW library system
G.S3	Students use the library tools and resources and are able to find professional information effectively
G.S4	Students use the Warsaw scientific libraries tools and resources

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

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

Number of effect of learning	Effects of learning i time
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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	Students are independent in the effective use of library services and resources
SC2	Students are aware of the need of systematic update of their own knowledge by usage of the professional medical scientific information
SC3	Students are interested in a new library offer – library tools and resources

6. CLASSES		
Form of class	Class contents	Effects of Learning
e-learning (e-L)	<ol style="list-style-type: none"> 1. Organisational structure of the MUW library system 2. Selected libraries of Warsaw 3. Characteristic of the library resources and MUW library system 4. Characteristic of the basic library collections 5. Library services 6. Characteristic of the library catalogs and description of the library catalogs usage 7. Library website, where library resources and services are presented 	<p>G.K1, G.S2, SC1, SC3 G.K5, G.S4, SC3 G.K2, G.S1, G.S2, SC1, SC2</p> <p>G.K2, G.S1,G.S2,SC1, SC2 G.K4,G.S1, G.S2, G.S3, S.C1- SC3 G.K3, G.S1, G.S3, SC1-SC3</p> <p>G.K4,G.S1-G.S3,SC1-S.</p>

7. LITERATURE
Obligatory
Library training online, available on the library website – http://biblioteka-szkolenia.wum.edu.pl/content/library-training-english-division
Supplementary

8. VERIFYING THE EFFECT OF LEARNING

Code of the course effect of learning	Ways of verifying the effect of learning	Completion criterion
e.g. G.K1, G.S1, K1	<i>This field defines the methods used for grading students e.g. pop quiz, test, written report etc.</i>	e.g. threshold number of points
G.K1 -G.K5, G.S1-GS4, SC1-SC3	Online test	Giving correct answers 20 (67%) out of 30 questions 2.0(failed) 0% - 66% 3.0(satisfactory) 67% - 76% 3.5(rather good) 77% - 82% 4.0(good) 83% - 89% 4.5(more than good) 90% - 96% 5.0(very good) 97% - 100%

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



Physical Education

1. IMPRINT	
Academic Year	2020/2021
Department	English Division Medicine and Dentistry
Field of study	Faculty of Medicine and Dentistry
Main scientific discipline <i>(in accord with appendix to the Regulation of Minister of Science and Higher education from 26th of July 2019)</i>	Sport Class
Study Profile <i>(general academic / practical)</i>	Practical
Level of studies <i>(1st level /2nd level/ uniform MSc)</i>	English Division
Form of studies	Full-time
Type of module / course <i>(obligatory / non-compulsory)</i>	Obligatory
Form of verification of learning outcomes <i>(exam / completion)</i>	Test

Educational Unit / Educational Units (and address / addresses of unit / units)	Departments of Physical Education and Sport, 2c Trojdena street, Tel. 22/5720528 studiumwfis@wum.edu.pl
Head of Educational Unit / Heads of Educational Units	mgr Jerzy Chrzanowski MSc
Course coordinator (title, First Name, Last Name, contact)	Mgr Michał Sieńko MSc
Person responsible for syllabus (First name, Last Name and contact for the person to whom any objections concerning syllabus should be reported)	Mgr Michał Sieńko MSc
Teachers	Mgr Michał Sieńko MSc

2. BASIC INFORMATION			
Year and semester of studies	Year 1, semester 1	Number of ECTS credits	0.00
FORMS OF CLASSES		Number of hours	ECTS credits calculation
Contacting hours with academic teacher			
Lecture (L)			
Seminar (S)			
Discussions (D)			
e-learning (e-L)			
Practical classes (PC)		30	
Work placement (WP)			
Unassisted student's work			
Preparation for classes and completions			

3. COURSE OBJECTIVES

O1	Significance of physical activity in human life.
O2	Aim and forms of physical activity.
O3	Physical activity and influence on the development of fitness.

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 <i>(in accordance with appendix to the Regulation of Minister of Science and Higher education from 26th of July 2019)</i>	Effects in time
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Knowledge – Graduate* knows and understands:

G.K1	Knows and understands the rules of team games.
G.K2	The role of physical activity in life.

Skills– Graduate* is able to:

G.S1	To do a proper warm up before main training session.
G.S2	Referee matches of various team games.

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

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

Number of effect of learning	Effects of learning i time
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Knowledge – Graduate knows and understands:

K1	
K2	

Skills– Graduate is able to:

S1	
S2	

Social Competencies – Graduate is ready for:

SC1	
SC2	

6. CLASSES		
Form of class	Class contents	Effects of Learning
C1-C15 practical	In line with the sports program or recreational discipline chosen by the student, covering the development of motor skills: strength, speed, endurance, motor coordination, agility and flexibility. Learning about new and attractive forms of physical activity, including "sports of the whole life" (individual and team), ensuring active participation in physical culture. Movement as a factor in preventing disease and strengthening health.	A.W3 B.W7 B.W21 D.W15 G.W21 D.U2 G.U2

7. LITERATURE
Obligatory
In line with the selected sports program or recreational discipline - presented during the first class, available for viewing on the Study website www.swfis.wum.edu.pl in the Didactics tab.
Supplementary
In line with the selected sports program or recreational discipline - presented during the first class, available for viewing on the Study website www.swfis.wum.edu.pl in the Didactics tab.

8. VERIFYING THE EFFECT OF LEARNING

Code of the course effect of learning	Ways of verifying the effect of learning	Completion criterion
A.W3 B.W7 B.W21 D.W15 G.W21	- <i>observation of the student's work</i> - <i>assessment of activity during classes</i> - <i>fitness tests</i>	- <i>regular attendance at classes (attendance 80%, i.e. not less than 12 classes per semester)</i> - <i>participation in fitness tests</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)*

Sports and recreational sections of the AZS WUM University Club.

The regulations of classes and information on the possibility of making up for classes due to absences can be found on the website Studium studiumwfis@wum.edu.pl in the Didactic tab.



FIRST MEDICAL AID WITH ELEMENTS OF NURSING

45. IMPRINT	
Academic Year	2020/2021
Department	FACULTY OF MEDICINE
Field of study	Medicine
Main scientific discipline <i>(in accord with appendix to the Regulation of Minister of Science and Higher education from 26th of July 2019)</i>	MEDICAL SCIENCES
Study Profile <i>(general academic / practical)</i>	<i>general academic</i>
Level of studies <i>(1st level / 2nd level / uniform MSc)</i>	<i>uniform MSc</i>
Form of studies	FULL TIME
Type of module / course <i>(obligatory / non-compulsory)</i>	OBLIGATORY
Form of verification of learning outcomes <i>(exam / completion)</i>	CREDIT WITH A MARK

Educational Unit / Educational Units <i>(and address / addresses of unit / units)</i>	<p>1st Department of Anesthesiology and Intensive Care (1MC1), Infant Jesus Teaching Hospital, Lindleya 4, 02-005 Warsaw www.anestezjologia1.wum.edu.pl 22 502 17 21</p> <p>2nd Department of Anesthesiology and Intensive Care (1MC2), Central Public Teaching Hospital, Banacha 1a, 02-097 Warsaw, 22 599 20 02</p> <p>Department of Paediatric Anaesthesia (1MC3), Pediatric Teaching Hospital, 63a Żwirki i Wigury St., 022 317 98 61</p>
Head of Educational Unit / Heads of Educational Units	<p>Dr hab. n. med. Janusz Trzebicki Dr n. med. Piotr Nowakowski Dr hab. n. med. Izabela Pągowska-Klimek</p>
Course coordinator <i>(title, First Name, Last Name, contact)</i>	Dr hab. n. med. Janusz Trzebicki
Person responsible for syllabus <i>(First name, Last Name and contact for the person to whom any objections concerning syllabus should be reported)</i>	<p>Marek Janiak 22 502 17 21 mjaniak1@wum.edu.pl</p>
Teachers	<p>Dr hab. n. med. Izabela Pągowska-Klimek, dr n. med. Piotr Nowakowski, Marek Janiak MD, Grzegorz Górniewski MD PhD, Karolina Dobrońska MD PhD, Lidia Jureczko MD PhD, Marcin Kołacz MD PhD, Magdalena Mierzewska-Schmidt MD PhD, Artur Baranowski MD, Piotr Sawicki MD, Jakub Kalbowski MD, Wojciech Romanik MD, Rafał Kowalczyk MD PhD, Jan Pluta MD, Małgorzata Gaworczyk MD, Maja Mytyk MD, Maciej Barwijek MD, Romana Cał MD, Hubert Kwapisz MD, Aleksandra Kołodziej MD, Przemysław Bolewski MD, Anna Przybył MD, Maryla Śmietanowska MD, Martyna Wielorańska MD, Aleksandra Święch-Zarzycka MD, Łukasz Wróblewski MD</p>

46. BASIC INFORMATION			
Year and semester of studies	I year, II semester	Number of ECTS credits	3.00
FORMS OF CLASSES		Number of hours	ECTS credits calculation
Contacting hours with academic teacher			
Lecture (L)			
Seminar (S)		6	0.25
Discussions (D)			
e-learning (e-L)		15	0.6

Practical classes (PC)	24	0.95
Work placement (WP)		
Unassisted student's work		
Preparation for classes and completions	30	1.2

47. COURSE OBJECTIVES	
C1	Knowledge and practical skills in basic cardiopulmonary resuscitation based on most recent guidelines
C2	Knowledge of assessment of basic vital signs in life threatening conditions
C3	Recognition of health and life hazards in first aid
C4	Knowledge of basic nursing skills in ambulatory and hospital care

48. STANDARDS OF LEARNING – DETAILED DESCRIPTION OF EFFECTS OF LEARNING <i>(concerns fields of study regulated by the Regulation of Minister of Science and Higher Education from 26 of July 2019; does not apply to other fields of study)</i>	
Code and number of effects of learning in accordance with standards of learning <i>(in accordance with appendix to the Regulation of Minister of Science and Higher education from 26th of July 2019)</i>	Effects in time
Knowledge – Graduate* knows and understands:	
F.W7	Most recent adult, pediatric and neonatal Basic Life Support (BLS) guidelines
C.W45	Common symptoms of acute poisoning, including alcohols, narcotics and other psychoactive substances, heavy metals and chosen drug groups
Skills– Graduate* is able to:	
E.U7	Assess general state, consciousness and alertness of a patient
E.U14	Recognise life threatening conditions
E.U15	Recognise signs and symptoms of alcohol, narcotic and other drug intoxication
E.U29	Performs basic procedures and medical treatments, including: a) Body temperature, pulse and non-invasive blood pressure measurement

	<ul style="list-style-type: none"> b) Monitoring of basic vital signs using a cardiomonitor and pulse oximetry c) Spirometry, oxygen therapy, mechanical ventilation d) Oro-pharyngeal airway device placement e) Intravenous, intramuscular and subcutaneous injections, intravenous cannulation, peripheral blood taking, blood culture taking, arterial and capillary blood sampling f) Nasal, pharyngeal and skin swab taking, pleural tap procedure g) Female and male urinary catheterisation, gastric tube placement, gastric lavage, enema h) Acquiring and interpreting a standard 12-lead electrocardiogram, cardioversion and cardiac defibrillation i) Glucose level measurement and usage of strip tests
E.U33	Initiate basic management in acute poisoning
E.U36	Manage minor trauma (place a dressing and immobilisation, manage and suture a wound)
F.U5	Place peripheral venous access
F.U9	Manage external bleeding
F.U10	Perform basic life support with external automated defibrillator (AED) and first aid
F.U21	Assess consciousness based on recommended international point scales

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

49. ADDITIONAL EFFECTS OF LEARNING <i>(non-compulsory)</i>	
Number of effect of learning	Effects of learning in time
Knowledge – Graduate knows and understands:	
W1	
W2	
Skills– Graduate is able to:	
U1	
U2	
Social Competencies – Graduate is ready for:	
SC1	
SC2	

50. CLASSES		
Form of class	Class contents	Effects of Learning
e-learning S1	Preparation for simulation centre classes: 1. Cannulation, 2. Patient transportation, 3. Introduction to simulation	E.U7
e-learning S2	Management of unconscious person	E.U7, F.U21
e-learning S3	Basic Life Support (BLS): Introduction, sequence and Automated External Defibrillator (AED)	F.W7, F.U10
e-learning S4	Pediatric Basic Life Support (PBLs)	F.W7, E.W6
e-learning S5	First Aid in Poisoning	C.W45
e-learning S6	Special circumstances of sudden cardiac arrest	F.W7
e-learning S7	Cardiac and Pulmonary life threatening conditions	F.W7
e-learning S8	Metabolic and neurological life threatening conditions	F.W7
e-learning S9	Basic monitoring	E.U29
e-learning S10	History of resuscitation. Ethical and legal issues in first aid.	F.W7
Seminar S1	Introduction. Safety and risks for first aid responders. Chain of survival.	F.W7
Seminar S2	Structure of emergency medical services, emergency departments and intensive care units	
Seminar S3	Case presentations	F.W7, C.W45, E.U7, E.U14, E.U15, E.U29, E.U33, E.U36, F.U5, F.U8, F.U9, F.U10, F.U21
Simulation Centre SC1	Basic Life Support (BLS)	F.W7
Simulation Centre SC2	Pediatric Basic Life Support (PBLs)	F.W7
Simulation Centre SC3	Management of trauma patient. Life threatening conditions	F.W7, F.U10, F.U8, F.U9, F.U5, E.U36
Simulation Centre SC4	Nursing skills (injections, fluid infusion, blood pressure measurement, cardiomonitor use, electrocardiogram)	E.U29, F.U5

51. LITERATURE

Obligatory

Basic Life Support (ALS) 2015 guidelines
First Aid guidelines

Supplementary

52. VERIFYING THE EFFECT OF LEARNING

Code of the course effect of learning	Ways of verifying the effect of learning	Completion criterion
F.W7. C.W45. E.U7. E.U14. E.U15. E.U29. E.U33. E.U36. F.U5. F.U8. F.U9. F.U10 F.U21	e-learning modules. Presence in mandatory classes. Practical and theoretical skills assessment	All e-learning modules completion. Active participation and presence in all seminars and practical classes.
F.W7. C.W45. E.U7. E.U14. E.U15. E.U29. E.U33. E.U36. F.U5. F.U8. F.U9. F.U10 F.U21	Practical assessment of resuscitation skills	Competence in advanced life support
F.W7. C.W45. E.U7. E.U14. E.U15. E.U29. E.U33. E.U36. F.U5. F.U8. F.U9. F.U10 F.U21	Multiple Choice Questions (MCQs) test	Correct answers to at least 60% of MCQs

53. 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)*

FIRST ONLINE MEETING FOR EACH GROUP IS COMPULSORY: will be held as a Microsoft TEAMS meeting on the first day of intended classes. The invitation code will be sent via email at least 1 week before the start of the course.

Seminars and lectures will be undertaken in the form of e-learning modules using either the lecturio website: www.wum.lecturio.com

OR e-learning WUM platform <https://e-learning.wum.edu.pl/en/login/index.php>

AND Microsoft teams live lectures according to the programme given on the first meeting

All lectures MUST BE COMPLETED as a prerequisite to the TEST.

Presence in practical classes is MANDATORY. Only viable and unforeseeable reasons for absence will be taken under review and information of absence should be provided latest the day following the absence! More than 3 absences will cause failure of the subject.

GROUP swaps in the simulation centre are not allowed after the start of classes.

PUNCTUALITY IS MANDATORY. Very late presence can be considered as an absence



Propaedeutics of addiction medicine

54. IMPRINT	
Academic Year	2020_2021
Department	English Division, faculty of medicine
Field of study	Medicine
Main scientific discipline <i>(in accord with appendix to the Regulation of Minister of Science and Higher education from 26th of July 2019)</i>	Medical sciences
Study Profile <i>(general academic / practical)</i>	<i>general academic</i>
Level of studies <i>(1st level /2nd level/ uniform MSc)</i>	<i>uniform MSc</i>
Form of studies	Stationary
Type of module / course <i>(obligatory / non-compulsory)</i>	Obligatory
Form of verification of learning outcomes <i>(exam / completion)</i>	completion (credit)
Educational Unit / Educational Units <i>(and address / addresses of unit / units)</i>	II Department of Psychiatry, Medical University of Warsaw Prof. Andrzej Kokoszka, MD, PhD, 8 Kondratowicza St. (section G, 4 floor), phone 22 326 58 92, seminary's and classes room – building H I-st floor Lecture's Room tel. 22/326-54-45

Head of Educational Unit / Heads of Educational Units	Prof dr hab Andrzej Kokoszka
Course coordinator <i>(title, First Name, Last Name, contact)</i>	Joanna Mięka MSc Joanna.mikula@wum.edu.pl Phone +48 22 326 54 45
Person responsible for syllabus <i>(First name, Last Name and contact for the person to whom any objections concerning syllabus should be reported)</i>	Joanna Mięka MSc Joanna.mikula@wum.edu.pl Phone +48 22 326 54 45
Teachers	Joanna Mięka MSc, Anna Kułakowska MSc, Agata Matuszewska MSc, Sasza Rychlica MSc Edyta Prochner MSc

55. BASIC INFORMATION			
Year and semester of studies	First year/summer 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)		5	0,2
Discussions (D)			
e-learning (e-L)			
Practical classes (PC)		10	0,3
Work placement (WP)			
Unassisted student's work			
Preparation for classes and completions		15	0,5

56. COURSE OBJECTIVES	
O1	To acquire general knowledge in the area of addiction, i.e. diagnosis, psychopathology, treatment

02	To acquire competence in contact and intervention for addicted patients
03	To acquire knowledge in the area of psychological mechanisms and problems in the family of addicted patient

57. 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 <i>(in accordance with appendix to the Regulation of Minister of Science and Higher education from 26th of July 2019)</i>	Effects in time
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Knowledge – Graduate* knows and understands:

C.W45	symptoms of the most common acute poisonings, including alcohol and drugs and other psychoactive substances, heavy metals and selected groups drugs
D.W3.	mechanisms, goals and methods of treating addiction to psychoactive substances
D.W13.	forms of violence, models explaining domestic violence and violence in the chosen ones institutions, social conditions of various forms of violence and the role of a doctor in recognizing it
E.W17.5	the most common symptoms, principles of diagnosis and treatment mental disorders, including: 5) disorders related to the use of psychoactive substances

Skills– Graduate* is able to:

E.U15.	recognize the condition after consuming alcohol, drugs and other stimulants
D.U10.	identify risk factors for the occurrence of violence, recognize violence and react accordingly
D.U2.	to perceive the signs of anti-health and self-destructive behavior and properly on not react;
E.U16.	plan diagnostic, therapeutic and prophylactic procedures

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

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

Number of effect of learning	Effects of learning i time
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Knowledge – Graduate knows and understands:

D.W1.	the social dimension of health and disease, the impact of the social environment (family, social networks) and social inequalities and socio-cultural differences on health, as well as the role of social stress in health and self-destructive behaviors;
D.W15.	principles of motivating the patient to pro-health behavior and informing about an unfavorable prognosis
D.W5.	rules and methods of communication with the patient and his family, which are used to build an empathetic, trust-based relationship;
D.W6.	the importance of verbal and non-verbal communication in the communication process with the patient and the concept of trust in interaction with the patient
D.W11.	the problem of adapting the patient and his family to the disease as a difficult situation and to events related to it, including dying and the family mourning process;

Skills– Graduate is able to:

D.U4.	build an atmosphere of trust during the entire diagnostic and treatment process;
D.U5.	conduct a conversation with an adult patient, child and family using the technique of active listening and expressing empathy and talk with the patient about his life situation
D.U11..	use basic psychological motivating and supportive interventions;
D.U16	demonstrate responsibility for upgrading and transferring knowledge of others

Social Competencies – Graduate is ready for:

SC1	establishing and maintaining a deep and respectful contact with the patient, and showing understanding for worldview and cultural differences
SC3	observance of medical secrecy and patient rights

59. CLASSES		
Form of class	Class contents	Effects of Learning
Seminar 1	A continuum of alcohol problems <ol style="list-style-type: none"> 1. Motives for using alcohol 2. The effect of alcohol toward the body 3. Risk factors for the development of addiction to substances: social, psychological, genetic, biological 	C.W45, D.W1. D.W3, E.W17.5, E.U15.

	<p>4. Definitions of terms: risky drinking, harmful drinking, alcohol addiction</p> <p>5. Addiction diagnosis: diagnostic criteria based on the ICD 10 and DSM5 classification, alcohol withdrawal syndrome</p> <p>6. Harms related to the use of alcohol: somatic, psychological, social</p>	
Seminar2	<p>Addiction to drugs and new psychoactive substances</p> <p>1. Risk factors for the development of addiction to substances: social, psychological, genetic, biological</p> <p>2. The pathophysiology of addictions</p> <p>3. Addiction diagnosis: diagnostic criteria based on the ICD 10 and DSM 5 classification; models of harmful and risky use</p> <p>4. Groups of psychoactive substances opioids, cannabinoids, hallucinogens, stimulants, benzodiazepines, new psychoactive substances ("legal highs") - action, withdrawal syndromes</p> <p>5. Effects and health and social harms of the mentioned groups of substances</p>	C.W45, D.W1., D.W3, E.W17.5
Seminar 3	<p>Addiction therapy</p> <p>1. The concept of psychological mechanisms of addiction.</p> <p>2. Basic assumptions of addiction therapy</p> <p>3. Motivating to start therapy</p> <p>4. Organization of the work of addiction treatment facilities</p> <p>5. The role of self-supporting groups, including Alcoholics Anonymous and Narcotics Anonymous in the treatment of addicts</p>	D.W3 , D.W6
Seminar 4	<p>A family with an addiction problem</p> <p>1. Co-addiction</p> <p>2. Roles of children</p> <p>3. Adult Children of the Alcoholic</p> <p>4. Domestic violence</p> <p>D.U2., DU10, D.W11.</p>	
Seminar 5	<p>Behavioral addictions</p> <p>1. Definition of behavioral addictions</p> <p>2. Diagnosing behavioral addictions</p> <p>3. Risk factors for the development of behavioral addictions</p> <p>4 The most popular behavioral addictions: pathological gambling; ; addiction to new technologies: smartphone, Internet, games; addiction to work, to sex</p> <p>5. Harm connected to behavioral addictions</p>	D.W15, D.W3, D.W6

	6. Behavioral addiction treatment	
Practical classes 1,2	Methods of early detection and treatment of substance use disorders, Role of screening tests	E.W17.5., E.U2.,
Practical classes 3,4	Diagnosing and motivating addicts to therapy, short therapeutic interventions, motivational interview, referral to specialist therapeutic centers. Selection of the appropriate therapeutic model depending on the severity of the addiction problem in the patient D.W6., D.W15., D.U4., D.U5., D.U11., E.U15., E.U16.	
Practical classes 5,6	Supporting family members suffering from addiction problems: adults and children. The problem of children of addicts - developmental and psychological consequences, adult children of alcoholics (ACA). D.U4., D.U5. , D.U10., D.W11.,	
Practical classes 7,8	Cooperation with members of self-help movements, meeting with members of AA and NA	
Practical classes 9,10	Presentation of practical tools and methods of therapy of addiction D.W3., E.U16	

60. LITERATURE
Obligatory
1. Chapter on “Substance related disorders” in Kaplan H.I., Sadock B.J. Synopsis of psychiatry. Ninth Edition. Williams and Wilkins, Baltimore, 2002 or later Supplementary literature:
Supplementary

61. VERIFYING THE EFFECT OF LEARNING		
Code of the course effect of learning	Ways of verifying the effect of learning	Completion criterion
D.W13, D.W3, E.W17.5, C.W45. D.W11.	<i>Test</i>	<i>> 60% correct answers Pass without grade</i>

C.W45, D.W1. D.W3, D.W6., D.W15., E.W17.5, E.U15	Oral check of preparation for each seminar	Active participation in seminars
D.W6., D.W15., D.U4., D.U5., D.U11., E.U15., E.W17.5., E.U2 E.U16	Oral check of preparation for each practical classes	Active participation in practical classes

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

1. Class attendance is obligatory.
2. All absences should be made up for, and form and date of making up for them should be agreed with the person responsible for teaching.
3. Active participation in the classes is a condition for obtaining credit