



Patomorphology

1. IMPRINT	
Academic Year	2024/2025
Department	Faculty of Medicine and Dentistry
Field of study	English Dentistry Division
Main scientific discipline	Medical sciences
Study Profile	General academic
Level of studies	Uniform Msc
Form of studies	Stationary
Type of module / course	Obligatory
Form of verification of learning outcomes	Exam
Educational Unit / Educational Units	Department of Pathology, Medical University of Warsaw Pawińskiego St. 3B, 02-106 Warsaw Phone (022) 599-16-70 patomorfologia@wum.edu.pl

**Załącznik nr 4A do Procedury opracowywania i okresowego przeglądu programów studiów
(stanowiącej załącznik do zarządzenia nr 68/2024 Rektora WUM z dnia 18 kwietnia 2024 r.)**

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2. BASIC INFORMATION

Year and semester of studies	III year, V semester	Number of ECTS credits	3
FORMS OF CLASSES		Number of hours	ECTS credits calculation
Contacting hours with academic teacher			
Lecture (L)		15 (15 in form of e-learning)	0,5
Seminar (S)		22	0,7
Discussions (D)		-	
e-learning (e-L)		-	
Practical classes (PC)		15	0,5
Work placement (WP)		-	
Unassisted student's work			
Preparation for classes and completions		39	1,3

3. COURSE OBJECTIVES

O1	Provide basic knowledge that will allow students to understand the process of disease and to help them develop ability to properly diagnose and treat patients, which is essential for clinical practice and further post-graduate training.
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O2	Provide with basic knowledge about the mechanisms of the origin and development of disease and its manifestations in the form of physiological and morphological changes
O3	Integrate the knowledge of pathomorphology with knowledge and skills from other basic and clinical specialities, especially in terms of their manifestation in oral cavity.

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

Code and number of effect of learning in accordance with standards of learning	Effects in time
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Knowledge – Graduate* knows and understands:

C.W6.	external and internal pathogens;
C.W8.	humoral and cellular mechanisms of innate and acquired immunity and mechanisms of hypersensitivity reactions and autoimmune processes;
C.W11.	pathomechanism of allergic diseases, selected hypersensitivity, autoimmune and immunodeficiency diseases;
C.W13.	the concept of health and disease, mechanisms of the formation and development of the disease process at the molecular, cellular, tissue and systemic levels, clinical symptoms of the disease, prognosis and complications of the disease;
C.W14.	mechanisms of inflammation and wound healing;
C.W15.	basic disturbances in the regulation of hormone secretion, water and electrolyte balance, acid-base balance, kidney and lung function, as well as the mechanisms of formation and effects of disturbances in the cardiovascular system, including shock;
C.W16.	diagnostic methods used in pathomorphology and the role of laboratory tests in the prevention and diagnosis of organ and systemic disorders;
C.W17.	signs of death and post-mortem changes as well as principles of technique and autopsy;
C.W30.	mechanisms leading to organ and systemic pathologies including infectious, invasive, autoimmune, immunodeficient, metabolic and genetic diseases;
C.W31.	the impact on the patient's body of physical, chemical and biological factors as well as avitaminosis and stress;
E.W1.	the relationship between morphological abnormalities and the function of altered organs and systems, as well as clinical symptoms and diagnostic and treatment options;
E.W15.	methods of cytological diagnostics and cytodiagnostic criteria for the diagnosis and differentiation of neoplastic and non-neoplastic diseases.

Skills– Graduate* is able to:

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C.U5.	analyze the clinical course of diseases in pathological processes;
C.U6.	identify pathological changes in cells, tissues and organs in terms of circulatory disorders, retrograde changes, progressive changes and inflammations;
C.U7.	determine pathological changes caused by HIV infection and observed in patients with acquired immunodeficiency syndrome (AIDS);
C.U14.	determine pathological changes of cells, tissues and organs according to basic mechanisms;
E.U12.	recognize diseases of the nasopharynx, their etiology and pathomechanism;
E.U13.	initially diagnose neoplastic changes in the nose, throat and larynx;
E.U15.	recognize skin cancers and precancerous conditions;
E.U16.	recognize dermatoses and collagenoses with symptoms within the oral mucosa;
E.U18.	diagnose diseases with enlargement of the lymph nodes in the neck and submandibular area as well as infectious diseases, with particular emphasis on changes in the oral cavity;
F.U5.	collect and preserve material for diagnostic tests, including cytological tests;
F.U6.	interpret the results of additional tests and consultations;
G.U28.	assess postmortem changes.

5. ADDITIONAL EFFECTS OF LEARNING

Number of effect of learning	Effects of learning i time
Knowledge – Graduate knows and understands:	
K1	-
Skills– Graduate is able to:	
C1	-
Social Competencies – Graduate is ready for:	
SC1	-

6. CLASSES

Form of class	Class contents	Effects of Learning
Lectures	L1 - Lecture 1 - Introduction to pathology General information, introduction to course, basic techniques in pathology.	C.W13., C.W16., E.W1., E.W15., C.U5., C.U14., F.U5., F.U6.

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	L2 - Lecture 2 - Hemodynamic disorders. Cardiovascular diseases. Pathology of edema, shock, thrombosis and embolism. Definition of infarction. Selected cardiovascular disease: hypertension, atherosclerosis.	C.W6., C.W15., C.W30., C.W31., C.U5., C.U6., C.U14.
	L3 - Lecture 3 – Pathology of contagious diseases. Description of morphological aspects of different types of contagious diseases, including AIDS.	C.W6., C.W8., C.W11., C.W14., C.W16., C.W30., E.W1., C.U5., C.U6., C.U7., C.U14., E.U18.
	L4 - Lecture 4 – Paediatric head and neck pathology. Selected topics form paediatric pathology.	C.W6., C.W8., C.W11., C.W14., C.W16., C.W30., E.W1., C.U6., C.U14., E.U12., E.U18.
	L5 - Lecture 5 – Gastrointestinal pathology. Pathology of selected neoplastic and non-neoplastic diseases in gastrointestinal tract.	C.W6., C.W8., C.W11., C.W14., C.W16., C.W30., E.W1., C.U5., C.U6., C.U14., F.U5., F.U6.
	L6 - Lecture 6 – Respiratory tract pathology. Endocrine system pathology. Pathology of selected neoplastic and non-neoplastic diseases of respiratory system and endocrine system.	C.W6., C.W8., C.W11., C.W14., C.W16., C.W30., E.W1., C.U5., C.U6., C.U14., F.U5., F.U6.
	L7 - Lecture 7 – Genitourinary system pathology. Pathology of selected neoplastic and non-neoplastic diseases of male reproductive system and urinary tract.	C.W6., C.W8., C.W11., C.W14., C.W16., C.W30., E.W1., C.U5., C.U6., C.U14., F.U5., F.U6.
	L8 - Lecture 8 – Female reproductive system and breast pathology. Pathology of selected neoplastic and non-neoplastic diseases in of female reproductive system and breast.	C.W6., C.W8., C.W11., C.W14., C.W16., C.W30., E.W1., C.U5., C.U6., C.U14., F.U5., F.U6.
Seminars	S1 - Seminar 1 – Adaptation, injury and cell death. Definition of adaptive changes: hyperplasia, hypertrophy, atrophy, metaplasia. Necrosis, apoptosis.	C.W6., C.W31., C.U6.
	S2 - Seminar 2 – Inflammation General information on basic types of inflammation. Nonepithelial neoplasms, dermatopathology Morphology of selected nonepithelial neoplasms, dermatopathology.	C.W6., C.W8., C.W11., C.W14., C.W30., C.W31., E.W1., C.U5., C.U14., E.U12., E.U18.
	S3 - Seminar 3 – Neoplasia: General information on the process of carcinogenesis. Epithelial neoplasms: benign lesions, precancerous lesions.	C.W6., C.W13., C.W16., C.W30., C.W31., E.W1., E.W15., C.U5., C.U7., C.U14., E.U13., E.U15., E.U18., F.U5., F.U6.
	S4 - Seminar 4 – Epithelial neoplasms: malignant lesions.	C.W6., C.W13., C.W16., C.W30., C.W31., E.W1., E.W15., C.U5., C.U7., C.U14., E.U13., E.U15., E.U18., F.U5., F.U6.
	S5 - Seminar 5 – MCQ test 1 Covers topics from seminars 1-4.	
	S6 - Seminar 6 – Nonepithelial neoplasms: bone and soft tissue.	C.W6., C.W16., C.W30., C.W31., E.W1., E.W15., C.U5., C.U14., F.U5., F.U6.
	S7 - Seminar 7 – Hematopathology.	C.W6., C.W8., C.W11., C.W16., C.W30., C.W31., E.W1., E.W15., C.U5., C.U6., C.U7., C.U14.,

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		E.U12., E.U13., E.U18., F.U5., F.U6.
	S8 - Seminar 8 – Head and neck pathology part I. Morphology of selected neoplastic and non-neoplastic diseases in head and neck.	C.W6., C.W8., C.W11., C.W16., C.W30., C.W31., E.W1., E.W15., C.U5., C.U14., E.U12., E.U13., E.U15., E.U16., E.U18., F.U5., F.U6.
	S9 - Seminar 9 – Head and neck pathology part II. Morphology of selected neoplastic and non-neoplastic diseases in head and neck.	C.W6., C.W8., C.W11., C.W16., C.W30., C.W31., E.W1., E.W15., C.U5., C.U14., E.U12., E.U13., E.U15., E.U16., E.U18., F.U5., F.U6.
	S10 - Seminar 10 - MCQ test 1 Covers topics from seminars 6-9.	
Practical Classes	PC 1 - Classes in autopsy room, including autopsy cases, gross pathology examination and sampling of surgical specimens – part I.	C.W6., C.W16., C.W17., E.W1., C.U14., G.U28.
	PC2 - Classes in autopsy room, including autopsy cases, gross pathology examination and sampling of surgical specimens – part II.	C.W6., C.W16., C.W17., E.W1., C.U14., G.U28.
	PC3 - Classes in autopsy room, including autopsy cases, gross pathology examination and sampling of surgical specimens – part III.	C.W6., C.W16., C.W17., E.W1., C.U14., G.U28.
	PC4 - Classes in autopsy room, including autopsy cases, gross pathology examination and sampling of surgical specimens – part IV	C.W6., C.W16., C.W17., E.W1., C.U14., G.U28.
	PC5 - Classes in autopsy room, including autopsy cases, gross pathology examination and sampling of surgical specimen – part V.	C.W6., C.W16., C.W17., E.W1., C.U14., G.U28.

7. LITERATURE

Obligatory

1. Robbins Basic Pathology, 10th edition, Kumar, Abbas, Aster

Supplementary

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8. VERIFYING THE EFFECT OF LEARNING

Code of the course effect of learning	Ways of verifying the effect of learning	Completion criterion
C.W6., C.W8., C.W11., C.W13., C.W14., C.W15., C.W16., C.W30., C.W31., E.W1., E.W15., C.U5., C.U6., C.U7., C.U14., E.U12., E.U13., E.U15., E.U16., E.U18., F.U6.	Two intermediate MCQ tests consisting of 24 questions, each worth 1 point.	0-12 points: fail (2) 13-15 points: satisfactory (3) 16-18 points: rather good (3,5) 19-20 points: good (4) 21-22 points: more than good (4,5) 23-24 points: very good (5)

C.W14., C.W15., C.W16., C.W17., C.W30., E.W1., E.W15., C.U5., C.U6., C.U7., C.U14., E.U15., E.U18., F.U6., G.U28.	Interaction with teacher and active participation in classes	Presence and participation in all classes are required to take intermediate MCQ tests.
C.W6., C.W8., C.W11., C.W13., C.W14., C.W15., C.W16., C.W17., C.W30., C.W31., E.W1., E.W15., C.U5., C.U6., C.U7., C.U14., E.U12., E.U13., E.U15., E.U16., E.U18., F.U5., F.U6., G.U28.	Student receives grade after passing final exam in the form of MCQ test consisting of 50 questions, each worth 1 point.	Student passes the exam if he scores at least 61% points (31 points). Thresholds for grades will be set based on the exam results of all students.

9. ADDITIONAL INFORMATION

1. Lectures are an integral part of the course and constitute the basis for the student's further work during seminars and exercises.
 2. Students are obliged to prepare for classes using primarily the teaching materials available at: www.patomorfolgia.wum.edu.pl.
 3. Assistant conducting a class has the right to verify students' knowledge by checking it orally or in writing. If a student is not adequately prepared for the class, they fail this particular class and are required to revise the material and present it in a form indicated by the assistant before the upcoming test.
 4. Being late for classes by more than 15 minutes results in an absence from the seminar/classes on a given day.
 5. Attendance at all seminars and exercises is mandatory. Absences from classes should be made up at the earliest possible date, in the form of a written task assigned by the assistant responsible for that particular exercise/seminar, no later than the day before the teaching council.
 6. Gross pathology classes take place in the autopsy room, which is located on the lower ground floor. Students bring aprons to classes. Department provides disposable gloves. Students with long hair should tie it up or protect it in some other way (e.g. with a cap or scarf). Before classes, students should change their clothes and leave their coats, personal items, etc. in the student locker room located on the third floor.
 7. Taking photos and recording sound and images during classes in the autopsy room is strictly prohibited. Phones must be completely turned off or in airplane mode.
 8. It is strictly forbidden to enter the autopsy room without the assistant and to bring bags/backpacks.
 9. Admission to the final exam requires a positive grade in both tests and passing all classes.
 10. Absence from a test must be excused within 7 following days.
 11. In the event of an excused absence, the student completes a test with the assistant in a form agreed individually. The grade from this test is treated as the grade from the first term.
 12. Unexcused absence from the test is equivalent to failing it.
 13. Retakes - form and date agreed individually with the teaching assistant. The retake test must be held no later than one week before the end of the winter semester.
 14. Board test - organized at the end of the winter semester and intended for students who have failed one or two retake tests (the student then takes both tests on one day). Failure to pass the board test results in failing the course and prohibits the student from taking the final exam.
 15. Retake of the final exam - the date during the winter retake exam session is set individually. In such case student needs to contact the office of the Department of Pathology.
 16. Curricular affairs: Łukasz Fus, MD, PhD; lukasz.fus@wum.edu.pl
- Any additional information is available at: <https://patomorfolgia.wum.edu.pl/>

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ATTENTION

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