



# Pomeranian Medical University in Szczecin

## SYLLABUS of the MODULE (SUBJECT) General Information

Module title: Pathomorphology with Oral Pathology	
Module type	Obligatory
Faculty PMU	Faculty of Medicine and Dentistry
Major	Dentistry
Level of study	long-cycle (S2J)
Mode of study	full-time studies
Year of studies, semester	2 <sup>nd</sup> year, winter semester
ECTS credits (incl. semester breakdown)	7
Type/s of training	lectures (25h) /seminars (30h)/ practical/ (30)
Form of assessment*	<input checked="" type="checkbox"/> graded assessment: <ul style="list-style-type: none"> <li><input type="checkbox"/> descriptive</li> <li><input checked="" type="checkbox"/> test</li> <li><input type="checkbox"/> practical</li> <li><input type="checkbox"/> oral</li> </ul> <input type="checkbox"/> non-graded assessment  <input checked="" type="checkbox"/> final examination <ul style="list-style-type: none"> <li><input type="checkbox"/> descriptive</li> <li><input checked="" type="checkbox"/> test</li> <li><input checked="" type="checkbox"/> practical</li> <li><input checked="" type="checkbox"/> oral</li> </ul>
Head of the Department/ Clinic, Unit	Prof. Elzbieta Urasińska MD, PhD
Tutor responsible for the module	Prof. Elzbieta Urasińska MD, PhD
Department's/ Clinic's/ Unit's website	<a href="https://www.pum.edu.pl/wydzialy/wydzial-medycyny-i-stomatologii/Katedra-i-Zaklad-Patomorfologii">https://www.pum.edu.pl/wydzialy/wydzial-medycyny-i-stomatologii/Katedra-i-Zaklad-Patomorfologii</a>
Language	English

\* replace ☐ into ☒ where applicable

**Detailed information**

<b>Module objectives</b>		Student is able to: <ul style="list-style-type: none"> <li><input type="checkbox"/> explain causes, mechanisms of development, and phenotypic effects of the disease at the macroscopic, microscopic and molecular level</li> <li><input type="checkbox"/> describe the relationship between morphological markers of disease and clinical and therapeutic decisions</li> <li><input type="checkbox"/> use algorithms that require microscopic examination for the diagnosis of diseases</li> <li><input type="checkbox"/> describe relationship between clinical symptoms and the cause of the disease</li> <li><input type="checkbox"/> explain the causes of death based on autopsy and microscopic examination</li> </ul>
Prerequisite /essential requirements	Knowledge	Basic knowledge of human anatomy, histology, pathophysiology, biochemistry.
	Skills	Ability to work using a microscope, computer skills. Critical reading of professional literature.
	Competences	Self-education habit, responsibility for entrusted good, group work skills, interpersonal communication skills, understanding of the need to learn throughout life.

**Description of the learning outcomes for the subject /module**

No. of learning outcome	Student, who has passed the (subject) knows /is able to /can:	SYMBOL (referring the standards)	Method of verification of learning outcomes*
W01	knows and understands external and internal pathogens	C.W6.	To complete the course student is expected to pass 2 MCQ tests and the exam. The exam consists of the practical part (one has to discuss and diagnose 3 histological slides) and the theory MCQ test (100 questions).
W02	knows and understands pathomechanism of allergic diseases, selected diseases related to hypersensitivity, autoimmune diseases and immune defects	C.W11.	see above
W03	knows and understands concepts of health and disease, mechanisms of developing disease on molecular, cellular, tissular and systemic level, clinical symptoms of disease, prognosis and its complications	C.W13.	see above
W04	knows and understands mechanisms of inflammatory reaction and wound healing	C.W14.	see above
W05	knows and understands basic disturbances of: regulation of hormonal secretion, water and electrolyte balance, acid-base equilibrium, kidneys and lungs function, mechanism of developing and consequences of disturbances in cardiovascular system, including shock	C.W15.	see above
W06	knows and understands diagnostic methods used in pathomorphology and importance of laboratory investigation in prophylaxis and examination of organ and system disorders	C.W16.	see above

W07	knows and understands symptoms of death and posthumous changes and knows basic techniques and diagnostics of autopsy	C.W17.	see above
W08	knows and understands mechanisms leading to organ and body pathologies, including infectious, invasive, autoimmune, immunodeficiency, metabolic and genetic diseases	C.W30.	see above
W09	knows and understands the influence of physical, chemical and biological factors, as well as avitaminosis and stress on the patient's body	C.W31.	see above
W10	knows and understands methods of cytological diagnostics and cytodiagnostic criteria for identification and differentiation of neoplastic and non-neoplastic diseases	E.W15.	see above
U01	is able to predict and explain complex pathomechanisms of disturbances leading to development of diseases	C.U4.	see above
U02	is able to analyze clinical course of diseases in pathological processes	C.U5.	see above
U03	is able to define pathological changes in cells, tissues and organs with regard to circulatory disturbances, retrogressive changes, progressive changes and inflammation	C.U6.	see above
U04	is able to define pathological changes due to HIV infection and ones observed in AIDS affected patients	C.U7.	see above
U05	is able to determine the pathologic changes of cells, tissues and organs according to basic mechanisms	C.U14.	see above
U06	is able to sample and protect material for diagnostic tests, including cytology	F.U5.	see above
K01	is ready to notice and recognize own limitations, make self-assessment of educational deficits and needs	K.5.	see above
K02	is ready to draw conclusions from own measurements or observations	K.8.	see above
K03	is ready to implement the principles of professional fellowship and cooperation in a team of specialists, including representatives of other medical professions, also in a multicultural and multinational environment	K.9.	see above

Table presenting LEARNING OUTCOMES in relation to the form of classes

No. of learning outcome	Learning outcomes	Type of training						
		Lecture	Seminar	Practical	Clinical classes	Simulations	E-learning	Other...
W01	C.W6.	X	X	X				
W02	C.W11.	X	X	X				
W03	C.W13.	X	X	X				
W04	C.W14.	X	X	X				
W05	C.W15.	X	X	X				
W06	C.W16.	X	X	X				

W07	C.W17.			X				
W08	C.W30.		X	X				
W09	C.W31.	X	X	X				
W10	E.W15.	X	X	X				
U01	C.U4.		X	X				
U02	C.U5.		X	X				
U03	C.U6.			X				
U04	C.U7.			X				
U05	C.U14.		X	X				
U06	F.U5.			X				
K01	K.5.			X				
K02	K.8.			X				
K03	K.9.			X				

Table presenting TEACHING PROGRAMME

No. of a teaching programme	Teaching programme	No. of hours	References to learning outcomes
<b>Winter semester</b>			
<b>Lectures (25h)</b>			
TK01	Right-sided and left-sided cardiac failure. Myocardial infarction.	2	C.W6., C.W13., C.W14., C.W15.
TK02	Fatty change. Necrosis. Apoptosis. Adaptive changes in cell growth and differentiation (hypertrophy, hyperplasia, metaplasia, dysplasia, atrophy)	2	C.W6., C.W13., C.W31.
TK03	Tuberculosis. Sarcoidosis. Neoplasms (definition, nomenclature, epidemiology, metastases, grading, staging, diagnosis).	3	C.W6., C.W14., C.W31., E.W15
TK04	Carcinoma of the lung and carcinoma of the kidney (epidemiology, etiology, pathogenesis, risk factors, classification, macro and microscopic images).	3	C.W6.
TK05	Esophageal carcinoma and colorectal carcinoma (epidemiology, etiology, pathogenesis, risk factors, classification, macro and microscopic images).	2	C.W6., E.W15
TK06	Malignant melanoma and carcinoma of the prostate (epidemiology, etiology, pathogenesis, risk factors, classification, macro and microscopic images).	2	C.W6.
TK07	Carcinoma of the larynx and nasopharyngeal carcinoma (epidemiology, etiology, pathogenesis, risk factors, classification, macro and microscopic images).	2	C.W6.
TK08	Reactive lymphadenitis (infectious mononucleosis, cat scratch disease, Yersiniosis, granuloma inguinale; macro and microscopic images).	3	C.W6., C.W11.
TK09	NHL and Hodgkin lymphoma (epidemiology, etiology, pathogenesis, risk factors, classification, macro and microscopic images).	2	C.W6.
TK10	Carcinoma of the breast (epidemiology, etiology, pathogenesis, risk factors, classification, macro and microscopic images).	2	C.W6.
TK11	Predictive factors in pathomorphology.	2	C.W6.
<b>Seminars (30h)</b>			
TK01	Pathogenesis of thrombosis and edema. Embolism. Lung infarction.	2	C.W6., C.W13., C.W15., C.W31., C.U4., C.U5., C.U14.
TK02	Liver cirrhosis.	1	C.W6., C.W13., C.W31., C.U4., C.U5., C.U14.

TK03	Amyloidosis.	1	C.W6., C.W11., C.W13., C.W30., C.U4., C.U5., C.U14.
TK04	Classification of inflammation. Purulent inflammation. Acute pneumonias (bronchopneumonia, lobar pneumonia).	2	C.W6., C.W11., C.W14., C.W30., C.W31., C.U4., C.U5., C.U14.
TK05	Pyelonephritis. Granulomatous inflammation: tuberculosis, sarcoidosis, lues.	2	C.W6., C.W14., C.U4., C.U5., C.U14.
TK06	Neoplasms (definition, nomenclature, epidemiology, metastases, grading, staging, diagnosis). Intraepithelial neoplasia.	2	C.W6., C.W13., C.U4., C.U5., C.U14., E.W15
TK07	Gastric carcinoma (early, advanced). Cervical carcinoma	2	C.W6., C.U4., C.U5., C.U14.
TK08	Peptic ulcer. Chronic hepatitis.	1	C.W6., C.W31., C.U4., C.U5., C.U14.
TK09	Liver tumors (primary and metastatic).	2	C.W6., C.U4., C.U5., C.U14., E.W15
TK10	Benign lesions of the breast. Malignant tumors of the uterine wall.	1	C.W6., C.U4., C.U5., C.U14., E.W15
TK11	Ovarian tumors – classification. Testicular tumors – classification.	1	C.W6., C.U4., C.U5., C.U14.
TK12	Benign and malignant tumors of the oral cavity. Oral manifestations of systemic diseases. Abnormalities of teeth. Inflammatory jaw lesions. Ulcerative conditions of the oral cavity.	2	C.W6., C.W11., C.W14., C.W31., C.U4., C.U5., C.U14., E.W15
TK13	Nevocellular nevi. Carcinoma of the skin.	1	C.W6., C.U4., C.U5., C.U14.
TK14	Paget disease. Bone tumors. Disorders of the temporomandibular joint.	2	C.W6., C.U4., C.U5., C.U14.
TK15	Cysts of the jaws and neck. Odontogenic tumors. Tumors of the orbit. Metastatic head and neck cancer.	2	C.W6., C.U4., C.U5., C.U14.
TK16	Tumors of the CNS. Meningitis.	2	C.W6., C.U4., C.U5., C.U14.
TK17	Rhinitis and sinusitis. Sinonasal polyps. Angiofibroma. Salivary gland tumors.	2	C.W6., C.W14., C.U4., C.U5., C.U14.
TK18	Thyroid cancer. Thyroiditis. Branchial cyst. Thyroglossal cyst.	2	C.W6., C.W30., C.U4., C.U5., C.U14., E.W15
<b>Practical classes (30h)</b>			
TK01	CIRCULATORY DISORDERS	3	C.W6., C.W13., C.W15., C.W31., C.U4., C.U5., C.U6., C.U14., K.5., K.8., K.9.
TK02	DEGENERATIVE AND PROLIFERATIVE CHANGES	3	C.W6., C.W13., C.W14., C.W30., C.W31., C.U4., C.U5., C.U6., C.U14., K.5., K.8., K.9.
TK03	INFLAMMATION	3	C.W6., C.W11., C.W13., C.W14., C.W30., C.W31., C.U4., C.U5., C.U6., C.U7., C.U14., K.5., K.8., K.9.
TK04	NEOPLASMS	3	C.W6., C.W13., C.W31., C.U4., C.U5., C.U6., C.U7., C.U14., K.5., K.8., K.9., E.W15., F.U5.
TK05	RESPIRATORY TRACT PATHOLOGY. GASTROINTESTINAL TRACT PATHOLOGY.	2	C.W6., C.W30., C.U4., C.U5., K.5., K.8., K.9.
TK06	URINARY TRACT PATHOLOGY. FEMALE and MALE GENITAL TRACT PATHOLOGY.	2	C.W6., C.U4., C.U5., C.U14., K.5., K.8., K.9.
TK07	ORAL PATHOLOGY. PATHOLOGY OF THE SKIN.	3	C.W6., C.W11., C.U4., C.U5., C.U14., K.5., K.8., K.9., E.W15., F.U5.
TK08	PATHOLOGY OF THE MANDIBLE AND MAXILLA. BONE TUMORS.	3	C.W6., C.U4., C.U5., C.U14., K.5., K.8., K.9.
TK09	PATHOLOGY OF THE NOSE, NASOPHARYNX, SINUSES AND LARYNX. PATHOLOGY OF THE CENTRAL NERVOUS SYSTEM.	3	C.W6., C.U4., C.U5., C.U14., K.5., K.8., K.9.

TK10	PATHOLOGY OF THE THYROID, HEMATOPOIETIC AND LYMPHOID SYSTEM.	3	C.W6., C.W30., C.U4., C.U5., C.U7., C.U14., K.5., K.8., K.9., E.W15., F.U5.
TK11	Demonstrational autopsies	2	C.W6., C.W17., C.U4., C.U5., C.U14., K.5., K.8., K.9.
<b>Simulation</b>			
<b>E-learning</b>			

**Booklist**

## Obligatory literature:

1. Kumar, Abbas, Aster "Robbins Basic Pathology, 10th ed. W.B. Saunders Co., 2017 (Hardcover ISBN: 9780323353175)
2. W. Domagała, M. Chosia, E. Urańska: "Atlas of histopathology". 1st edition, 2006 (ISBN 83-200-3476-0)

## Supplementary literature:

1. J. Regezi, J. Sciubba, R. Jordan: Oral Pathology: Clinical Pathologic Correlations, Saunders; 7 edition 2016, ISBN-10: 0323297684, ISBN-13: 978-0323297684

**Student's workload**

Form of student's activity (in-class participation; activeness, produce a report, etc.)	Student's workload [h]
	Tutor
Contact hours with the tutor	85
Time spent on preparation to seminars/ practical classes	65
Time spent on reading recommended literature	10
Time spent on writing report/making project	0
Time spent on preparing to colloquium/ entry test	20
Time spent on preparing to exam	30
Other .....	
Student's workload in total	210
<b>ECTS credits for the subject (in total)</b>	<b>7</b>
<b>Remarks</b>	

\* Selected examples of methods of assessment:

EP – written examination

EU – oral examination

ET – test examination

EPR – practical examination

K – colloquium

R – report

S – practical skills assessment

RZC – practical classes report, incl. discussion on results

O – student's active participation and attitude assessment

SL – lab report

SP – case study

PS - assessment of student's ability to work independently

W – entry test

PM – multimedial presentation

other