



# Pomeranian Medical University in Szczecin

## SYLLABUS of the MODULE (SUBJECT)

valid from the academic year 2018/2019

### General Information

Module title	<b>PATHOMORPHOLOGY WITH ORAL PATHOLOGY</b>
Module type	<i>Obligatory</i>
Faculty	<i>Faculty of Medicine and Dentistry</i>
Field of study	<i>Medicine and Dentistry</i>
Major	<i>Not applicable</i>
Level of study	long-cycle (S2J)
Mode of study	intramural
Year of studies, semester	<i>Year II, semester 3</i>
ECTS credits (incl. semester breakdown)	7
Type/s of training	<i>lectures (20h) /seminars (15h)/ practical (50h)</i>
Form of assessment	<u>final examination:</u> <input type="checkbox"/> <u>test</u> <input type="checkbox"/> <u>practical</u> <input type="checkbox"/> <u>oral</u>
Head of the Department/ Clinic, Unit	Prof. Elżbieta Urańska MD, PhD
Tutor responsible for the module	Prof. Elżbieta Urańska MD, PhD
Department's/ Clinic's/ Unit's website	<a href="https://www.pum.edu.pl/wydzialy/wydzial-lekarski/Katedra-i-Zaklad-Patomorfologii">https://www.pum.edu.pl/wydzialy/wydzial-lekarski/Katedra-i-Zaklad-Patomorfologii</a>
Language	English

**Detailed information**

<b>Module objectives</b>		<input type="checkbox"/> Explain causes, mechanisms of development, and phenotypic effects of the disease at the macroscopic, microscopic and molecular level <input type="checkbox"/> Describe the relationship between morphological markers of disease and clinical and therapeutic decisions <input type="checkbox"/> Use algorithms that require microscopic examination for the diagnosis of diseases <input type="checkbox"/> Describe relationship between clinical symptoms and the cause of the disease <input type="checkbox"/> Explain the causes of death based on autopsy and microscopic examination
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) ZEK	Method of verification of learning outcomes *
W01	knows external and internal pathogens	K_C.W06	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 pathomechanism of allergic diseases, selected diseases related to hypersensitivity, autoimmune diseases and immune defects	K_C.W11	see above
W03	knows and understands concepts of health and disease, mechanisms of developing disease on molecular, cellular, tissue and systemic level, clinical symptoms of disease, prognosis and its complications	K_C.W13	see above
W04	knows and explains mechanisms of inflammatory reaction and wound healing	K_C.W14	see above
W05	knows 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	K_C.W15	see above
W06	knows diagnostic methods used in pathomorphology and importance of laboratory investigation in prophylaxis and examination of organ and system disorders	K_C.W16	see above

W07	recognizes symptoms of death and posthumous changes and knows basic techniques and diagnostics of autopsy	K_C.W17	see above
U01	predicts and explains complex pathomechanisms of disturbances leading to development of diseases	K_C.U04	see above
U02	explains clinical course of diseases in pathological processes	K_C.U05	see above
U03	explains pathological changes in cells, tissues and organs with regard to circulatory disturbances, retrogressive changes, progressive changes and inflammation	K_C.U06	see above
U04	explains pathological changes due to HIV and ones observed in AIDS affected patients	K_C.U07	see above
K01	shows habit of self-education and lifelong education	K_K01	see above
K02	accepts need of standards of conduct and legislation regarding medical practice	K_K02	see above
K03	understands sense of responsibility for entrusted property	K_K07	see above
K04	can make opinions on different aspects of professional activities	K_K10	see above

Table presenting learning outcomes of the subject/module in relation to the form of classes

No.	SYMBOL (referring the standards) ZEK	Type/s of training							
		Lecture	Seminar	Practical classes	Clinical classes	...	...	...	Other...
1.	K_C.W06	x	x	x					
2.	K_C.W11		x						
3.	K_C.W13	x	x	x					
4.	K_C.W14		x	x					
5.	K_C.W15	x	x	x					
6.	K_C.W16	x	x	x					
7.	K_C.W17			x					
8.	K_C.U04			x					
9.	K_C.U05	x	x	x					
10.	K_C.U06	x	x	x					
11.	K_C.U07		x	x					
12.	K_K01		x	x					
13.	K_K02		x	x					
14.	K_K07		x	x					
15.	K_K10		x	x					

Module contents no.	Description of teaching programme	No. of hours	References to learning outcomes
	<b>Lectures (20h):</b>		
TK01	Right-sided and left-sided cardiac failure. Myocardial infarction.	2	W01, K_C.W13, K_C.W15, K_C.W16, K_C.U05, K_C.U06
TK02	Fatty change. Necrosis. Apoptosis. Adaptive changes in cell growth and differentiation (hypertrophy, hyperplasia, metaplasia, dysplasia, atrophy)	2	W01, K_C.W13, K_C.W15, K_C.W16, K_C.U05, K_C.U06
TK03	Tuberculosis. Sarcoidosis.	2	W01, K_C.W13, K_C.W15, K_C.W16, K_C.U05, K_C.U06
TK04	Neoplasms (definition, nomenclature, epidemiology, metastases, grading, staging, diagnosis).	2	W01, W03, W05, W06, U02, U03
TK05	Colorectal carcinoma. Carcinoma of the lung.	2	W01, W03, W05, W06, U02, U03
TK06	Carcinoma of the breast. Benign lesions of the breast.	2	W01, W03, W05, W06, U02, U03
TK07	Inflammatory jaw lesions. Ulcerative conditions of the oral cavity.	2	W01, W03, W05, W06, U02, U03
TK08	Tumors of the orbit. Metastatic head and neck cancer.	2	W01, W03, W05, W06, U02, U03
TK09	Malignant melanoma. Salivary gland tumors.	2	W01, W03, W05, W06, U02, U03
TK10	Hodgkin lymphoma. Reactive lymphadenitis.	2	W01, W03, W05, W06, U02, U03
	<b>Seminars (15h):</b>		
TK01	Pathogenesis of thrombosis and edema. Embolism. Lung infarction. Aneurysms.	2	W01, W02, W03, W04, W05, W06, U02, U03, U04, K01, K02, K03, K04
TK02	Classification of inflammation. Purulent inflammation. Acute pneumonias (bronchopneumonia, lobar pneumonia).	2	W01, W02, W03, W04, W05, W06, U02, U03, U04, K01, K02, K03, K04
TK03	Liver tumors. Carcinoma of the esophagus.	2	W01, W02, W03, W04, W05, W06, U02, U03, U04, K01, K02, K03, K04
TK04	Ovarian tumors – classification. Testicular tumors – classification.	2	W01, W02, W03, W04, W05, W06, U02, U03, U04, K01, K02, K03, K04
TK05	Benign and malignant tumors of the oral cavity. Oral manifestations of systemic diseases. Abnormalities of teeth	2	W01, W02, W03, W04, W05, W06, U02, U03, U04, K01, K02, K03, K04
TK06	Cysts of the jaws and neck. Odontogenic tumors.	2	W01, W02, W03, W04, W05, W06, U02, U03, U04, K01, K02, K03, K04
TK07	Rhinitis and sinusitis. Sinonasal polyps. Angiofibroma. Carcinoma of the larynx. Nasopharyngeal carcinoma.	2	W01, W02, W03, W04, W05, W06, U02, U03, U04, K01, K02, K03, K04
TK08	Thyroid cancer. Thyroiditis.	1	W01, W02, W03, W04, W05, W06, U02, U03, U04, K01, K02, K03, K04
	<b>Practical classes (50h):</b>		
TK01	CIRCULATORY DISORDERS	4	W01, W03, W04, W05, W06, U02, U03, U04, K01, K02, K03, K04, W07, U01
TK02	DEGENERATIVE AND PROLIFERATIVE CHANGES	4	W01, W03, W04, W05, W06, U02, U03, U04, K01, K02, K03, K04, W07, U01
TK03	INFLAMMATION	4	W01, W03, W04, W05, W06, U02, U03, U04, K01, K02, K03, K04, W07, U01
TK04	NEOPLASMS	4	W01, W03, W04, W05, W06, U02, U03, U04, K01, K02, K03, K04, W07, U01

TK05	RESPIRATORY TRACT PATHOLOGY. GASTROINTESTINAL TRACT PATHOLOGY.	4	W01, W03, W04, W05, W06, U02, U03, U04, K01, K02, K03, K04, W07, U01
TK06	URINARY TRACT PATHOLOGY. FEMALE and MALE GENITAL TRACT PATHOLOGY.	4	W01, W03, W04, W05, W06, U02, U03, U04, K01, K02, K03, K04, W07, U01
TK07	ORAL PATHOLOGY. PATHOLOGY OF THE SKIN.	4	W01, W03, W04, W05, W06, U02, U03, U04, K01, K02, K03, K04, W07, U01
TK08	PATHOLOGY OF THE MANDIBLE AND MAXILLA. BONE TUMORS.	4	W01, W03, W04, W05, W06, U02, U03, U04, K01, K02, K03, K04, W07, U01
TK09	PATHOLOGY OF THE NOSE, NASOPHARYNX, SINUSES AND LARYNX. PATHOLOGY OF THE CENTRAL NERVOUS SYSTEM.	4	W01, W03, W04, W05, W06, U02, U03, U04, K01, K02, K03, K04, W07, U01
TK10	PATHOLOGY OF THE THYROID, HEMATOPOIETIC AND LYMPHOID SYSTEM.	4	W01, W03, W04, W05, W06, U02, U03, U04, K01, K02, K03, K04, W07, U01
TK11	Demonstrational autopsies	10	W06, W07, U01, U02, U03

<b>Booklist</b>
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)
3. 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 (balance sheet of ECTS credits)			
Form of student's activity (in-class participation; activeness, produce a report, etc.)	Student's workload [h]		
	Tutor	Student	Average
Contact hours with the tutor	85		
Time spent on preparation to seminars/ practical classess	85		
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	40		
Other .....			
Student's workload in total	240		
ECTS credits for the subject (in total)	7		
Remarks			

\* 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...