# DESCRIPTION OF THE COURSE OF STUDY

Course code		0912-7LEK-B2.6-P							
Name of the course in	Polish	Patologia							
	English	Pathology							

# 1. LOCATION OF THE COURSE OF STUDY WITHIN THE SYSTEM OF STUDIES

1.1. Field of study	Medicine
1.2. Mode of study	Full-time
1.3. Level of study	Uniform Master's studies
1.4. Profile of study*	practical
1.5. Specialization*	Lack
1.6. Unit running the course of study	Faculty of Medicine and Health Sciences
1.7. Person/s preparing the course description	Piotr Lewitowicz MD, PhD
1.8. Person responsible for the course of study	Piotr Lewitowicz MD, PhD
1.9. Contact	plewitowicz@ujk,edu.pl

#### 2. GENERAL CHARACTERISTICS OF THE COURSE OF STUDY

2.1. Affiliation with the module	PRECLINICAL SCIENCES
2.2. Language of instruction	English
2.3. Semesters in which the course of study is offered	5 <sup>th</sup> - 6 <sup>th</sup> semester
2.4. Prerequisites*	Anatomy, histology, physiology, pathophysiology

#### 3. DETAILED CHARACTERISTICS OF THE COURSE OF STUDY

3.1. Form of classes		Lectures: 50, classes: 100, autopsies						
3.2. Place of classes		Lecture Halls at UJK						
		Didactic rooms at UJK						
		Autopsy room						
3.3. Form of assessm	nent	Partial theoretical and practical tests ( web based PathXL test)						
		Final theoretical and practical exam (web based PathXL test)						
3.4. Teaching method	ods	Lecture – lecture with multimedia presentation						
		Class - discussion about current topic, working with digital pictures –						
		macroscopic and microscopic pictures and slides. Discuss about						
		predicting and prognostic factors.						
		Autopsy – active participation in the autopsy, discussion about a case						
3.5. Bibliography	Required reading	1. V. Kumar, A. K. Abbas, J. C. Aster. Robbins and Cotran Pathologic						
		Basis of Disease. IXth Edition, 2015, Elsevier.						
		2. V. Kumar, A. K. Abbas, J. C. Aster. Robbins Basic Pathology. IX						
		Edition, 2013, Elsevier.						
	Further reading	1. E. C. Klatt. Robbins and Cotran Atlas of Pathology, 3th Edition,						
		2015, Elsevier.						

# 4. OBJECTIVES, SYLLABUS CONTENT AND INTENDED TEACHING OUTCOMES

# **4.1.** Course objectives (including form of classes)

#### Lecture

- C1 The aim of the subject is to present the issues of general human pathology with particular regard to adaptation processes, inflammations, circulatory disorders, tumors.
- C2 The aim is to know the pathogenesis of non-cancerous diseases and cancers.
- C3 The goal is to get familiar with pathological methods as well knowing their limitations.
- C4 The role of strict cooperation clinicians with pathologists.
- C5 The goal is to know the relationship between the patient, the clinician and the pathomorphologist. Classes
- C1 The aim of the exercises is to continue the issues presented during the lectures with a special emphasis on understanding the cause-effect sequence of organ diseases
- C2 The goal is to get to know the detailed pathology of the organs
- C3 The goal is to know the morphology of organs
- C4 The aim is to know the morphological exponent of non-cancerous diseases and cancers

### 4.2. Detailed syllabus (including form of classes)

Lectures, Classes - The table of content

# WINTER SEMESTER

- 1. Lecture 1 cellular responses, injury, adaptation and death 4h 5. 10.18
- 2. Lecture 2 Inflammation, wound healing 4h 8.10.18
- 3. Class 1 inflammation 4h 12.10. 18
- 4. Class 2 hemodynamic disorder, thromboembolic disease and shock 4h 19.10.18
- 5. Lecture 3 genetic disorders -4h 22.10.18
- 6. Class 3 diseases of immune system 4h 26.10.18
- 7. Lecture 4 neoplasia 4h 29.10.18
- 8. Lecture 5 neoplasia part II 4h 5.11.18
- 9. Class 4 diseases of immune system part II 3h 9.11.18
- 10. Class 5 infectious disease 3h 12.11.18
- 11. Class 6 classes 1-5 review and summary 3h- 16.11.18
- 12. Class 7 blood vessels 3h- 19.11.18
- 13. Class 8- 1-st test classes 1-7 2h 22.11.18
- 14. Class 9 CNS 4h 7.12.18
- 15. Lecture 6 environmental and nutritional disease 3h 10.12.18
- 16. Class 10- disease of infancy and childhood 3h 14.12.18
- 17. Class 11 diseases of lymph nodes, white blood cells, spleen and thymus 3h 21.12.18
- 18. Class 12 head and neck diseases -3h 07.01.19
- 19. Class 13 the heart 3h 17.01.19
- 20. Class 14 diseases of red blood cells and bleeding disorders 3h 21.01.19
- 21. Class 15 –classes 6-14 review and summary 3h- 25.01.19
- 22. <u>Class 16- 2-nd test classes 8-15 2h a half hour coffee break Lecture 7 test first semester content 2h 28.01.18 (session 28.01 8.02.19)</u>

# **SUMMER SEMESTER**

- 23. Class 17-lung 3h
- 24. Class 18 head and neck diseases -3h
- 25. Lecture 8 GI pathology 4h
- 26. Class 19 GI pathology 1-st part 3h
- 27. Class 20 GI pathology 2-nd part 3h
- 28. Lecture 9 Liver and biliary tree 4h
- 29. Class 21 liver and biliary tree 3h
- 30. Class 22 pancreas 3h
- 31. Class 23 kidney 1-st part 3h
- 32. Class 24 kidney 2-nd part 3h
- 33. Class 25 classes 12-22 review and summary 2h
- 34. <u>Class 26 3-rd test</u>, <u>classes 10-18 2h</u>
- 35. Class 27 Urinary tract and male genital system 3h
- 36. Lecture 10 Female genital system 4h
- 37. Class 28 female genital system 3h
- 38. Class 29 the breast 3h
- 39. Lecture 11 endocrine system 4h
- 40. Class 30 endocrine system 3h
- 41. Class 31 the skin 3h
- 42. Lecture 12 soft tissue tumors 4h
- 43. Lecture 13- bone and joints pathology 3h
- 44. Class 32- classes 23-31 review and summary 2h
- 45. Class 33 autopsies 3h
- 46. <u>Class 34 4-th test classes 19-25 2h</u>

# 47. <u>Lecture14 – 2-nd semester test – 2h</u>

The retakes of the previously failed tests – 4h Autopsies, practical skills - 6h The final exam – 1,5 h

**4.3.** Education outcomes in the discipline

Code	A student, who passed the course	Relation to teaching outcomes				
	within the scope of <b>KNOWLEDGE</b> :					
W01	knows the terminology used in anatomic pathology;	C.W25.				
W02	knows basic mechanisms of tissue and cell damage	C.W26.				
W03	determines the clinical course specific and non-specific inflammations and describes the regeneration of tissues and organs;					
W04	knows the definition and pathophysiology of shock, with particular emphasis on the differentiation of shock and multiple organ failure's causes;					
W05	knows the etiology of hemodynamic disturbances, retrogressive and progressive changes;					
W06	knows the problems concerning specific organ pathology, macroscopic and microscopic images and the clinical course of pathological changes in various organs;	C.W30.				
W07	describes the consequences of developing pathological changes for topographically adjacent organs;	C.W31.				
W08	lists internal and external pathogens, both modifiable and non-modifiable;	C.W32.				
W09	lists clinical forms of most common diseases of various systems and organs, metabolic diseases and disorders of water-electrolyte balance and acid-base balance;	C.W33.				
	within the scope of ABILITIES:					
U01	operates the optical microscope, also making use of immersion;	A.U1.				
U02	recognizes histological structures of organs, tissues, cells and cellular structures on the optical or histological microscope images, makes descriptions and interprets the structure and relations between the structure and the function;	A.U2.				
U03	understands the relation between images of tissue and organ damage and clinical symptoms of the disease, medical history and the results of laboratory determinations;	C.U11.				

		Assessment of the intended teaching outcomes  Method of assessment (+/-)																				
Teaching	Exam or	Exam oral/written*				Test*			Project*			Effort in class*			ly*	Group work*			Others*			
outcomes (code)	Form	Form of classes			Form of classes			Form of classes			Form of classes			Form of classes			Form of classes			Form of classes		
	L	C		L	С		L	С		L	С		L	С		L	С		L	С		
W01	+				+											+	+					
W02	+															+	+					
W03					+											+	+					
W04	+																+					
W05	+																+					
W06					+												+					

W07			+							+			
W08	+									+			
W09	+									+			
U01			+			+				+		+	
U02			+			+				+		+	
U03			+							+		+	

<sup>\*</sup>delete as appropriate

4.5. Crit	4.5. Criteria of assessment of the intended teaching outcomes									
Form of classes	Grade	Criterion of assessment								
)	3	61-68% The result of the practical and theoretical tests								
(T)	3,5	69%-76% The result of the practical and theoretical tests								
ure	4	77%-84% The result of the practical and theoretical tests								
lecture	4,5	85%-92% The result of the practical and theoretical tests								
	5	93%-100% The result of the practical and theoretical tests								
*	3	61-68% The result of the practical and theoretical tests								
(C)	3,5	69%-76% The result of the practical and theoretical tests								
ses (	4	77%-84% The result of the practical and theoretical tests								
classes (C)*	4,5	85%-92% The result of the practical and theoretical tests								
၁	5	93%-100% The result of the practical and theoretical tests								

• Thresholds are valid from 2018/ 2019 academic year

# 5. BALANCE OF ECTS CREDITS - STUDENT'S WORK INPUT

	Student's workload
Category	Full-time studies
NUMBER OF HOURS WITH THE DIRECT PARTICIPATION OF THE TEACHER /CONTACT HOURS/	150
Participation in lectures*	50
Participation in classes, seminars, laboratories*	100
Preparation in the exam/final test*	
Others*	
INDEPENDENT WORK OF THE STUDENT/NON-CONTACT HOURS/	150
Preparation for the lecture*	50
Preparation for the classes, seminars, laboratories*	90
Preparation for the exam/test*	10
Gathering materials for the project/Internet query*	
Preparation of multimedia presentation	
Others*	
TOTAL NUMBER OF HOURS	300
ECTS credits for the course of study	12

 $\textbf{Accepted for execution} \ (\textit{date and signatures of the teachers running the course in the given academic year)}$ 

1-st July 2018, Piotr Lewitowicz MD, PhD