

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*	General academic
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 th - 6 th semester
2.4. Prerequisites*	Anatomy, histology, physiology, pathophysiology

3. DETAILED CHARACTERISTICS OF THE COURSE OF STUDY

3.1. Form of classes	Lectures: 45, classes: 90, autopsies
3.2. Place of classes	Lecture Halls at UJK Didactic rooms at UJK Autopsy room
3.3. Form of assessment	Partial theoretical and practical tests (web based PathXL test) Final theoretical and practical exam (web based PathXL test)
3.4. Teaching methods	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
	Further 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.

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. 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)

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. Class 26 – 3-rd test , classes 10-18 – 2h
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. Class 34 – 4-th test classes 19-25 - 2h

47. Lecture14 – 2-nd semester test – 2h

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 KNOWLEDGE:		
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;	C.W27.
W04	knows the definition and pathophysiology of shock, with particular emphasis on the differentiation of shock and multiple organ failure's causes;	C.W28.
W05	knows the etiology of hemodynamic disturbances, retrogressive and progressive changes;	C.W29.
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.

4.4. Methods of assessment of the intended teaching outcomes

Teaching outcomes (code)	Method of assessment (+/-)																				
	Exam oral/written*			Test*			Project*			Effort in class*			Self-study*			Group work*			Others*		
	Form of classes			Form of classes			Form of classes			Form of classes			Form of classes			Form of classes			Form of classes		
	L	C	...	L	C	...	L	C	...	L	C	...	L	C	...	L	C	...	L	C	...
W01	+				+																
W02	+																				
W03					+																
W04	+																			+	
W05	+																			+	
W06					+															+	

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

*delete as appropriate

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

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

Accepted for execution (date and signatures of the teachers running the course in the given academic year)

1st July 2018, Piotr Lewitowicz MD, PhD