

1.	Name of the subject	<b>PATHOLOGY 1</b>			
2.	Code	OM 313			
3.	Study program	General medicine			
4.	Organizer of the study program (Unit, Institute, Cathedra, Section)	UKIM – Medical Faculty Department of Pathology			
5.	Degree of education (first or second cycle)	Integrated cycle			
6.	Academic year / Semester	Third / V	7.	No. of ECTS credits	9
8.	Lecturer	Head of department: Liljana Spasevska *The lectures are conducted by all teachers at the department of Pathology			
9.	Conditions for enrolling the subject	Passed first part of the professional exam Fulfilled conditions for enrolment in the Vth semester			
10.	<b>Aims of the subject program (skills):</b> <ul style="list-style-type: none"> <li>• The student will get to know the causes and general mechanisms of development of the diseases, as well as understand the structural and functional changes in the cells, tissues and organs by using the routine morphological and contemporary molecular techniques.</li> <li>• While studying general pathology, the student will learn about the basic cellular and tissue responses to various pathological stimuli.</li> <li>• In the special section, the student will learn the characteristic responses and changes during various pathological conditions of RES, cardiovascular and respiratory system.</li> <li>• The student will learn the macroscopical and histological methods of analysis of the morphological changes in the organs, tissues and cells, based on which the diagnosis is established and therapy is planned.</li> </ul>				
11.	<b>Content of the subject program:</b>  <b>Theory:</b> General pathology and part of the special pathology: <ul style="list-style-type: none"> <li>• Cellular injury, adaptations and death</li> <li>• Hemodynamic disorders, thrombosis and shock</li> </ul>				

	<ul style="list-style-type: none"> <li>• Acute and chronic inflammation</li> <li>• Tissue regeneration and reparation</li> <li>• Specific inflammation</li> <li>• Genetic diseases</li> <li>• Immunopathology</li> <li>• Environmental and nutritional diseases</li> <li>• Pathology of the neoplasia</li> <li>• Pathology of the reticuloendothelial system</li> <li>• Pathology of the cardiovascular system</li> <li>• Pathology of the respiratory system</li> </ul> <p><b>Practical training:</b></p> <p>Learning the skills of microscopic analysis and diagnostics on histopathological slides, dissection and macroscopic analyses of surgical specimens, autopsy technique, interpretation of the changes with determination of the basic disease and immediate cause of death; altogether, practical application of the acquired theoretical knowledge.</p>			
12.	<b>Methods of learning:</b> Interactive lectures, practical exercises / seminars			
13.	Total time available	270 classes Credits 9x30 classes per 1 credit= 270  270-135 theoretical classes, exercises and seminars= 135 classes home learning)		
14.	Distribution of the available time			
15.	Forms of teaching activities	15.1	Lessons – theoretical lessons	75 classes
		15.2	Exercises (laboratory), seminars, team work	Exercises: 60 classes
16.	Other forms of activities	16.1	Project tasks	Facultative
		16.2	Independent tasks	Facultative
		16.3	Home learning	135 classes

17.	Evaluation		points
17.1	Tests	<div style="text-align: right;">min-max</div> <p>Continuous checks of knowledge* points 12 – 20</p> <p><b>Continuous checks of knowledge (colloquium):</b>  2 written tests</p> <p>Covering the following areas of Pathology 1:</p> <p><b>The first colloquium:</b></p> <ol style="list-style-type: none"> <li>1. Cellular injury, adaptations and death</li> <li>2. Hemodynamic disorders, thrombosis and shock</li> <li>3. Acute and chronic inflammation</li> </ol> <p><b>The second colloquium:</b></p> <ol style="list-style-type: none"> <li>1. Tissue regeneration and reparation</li> <li>2. Specific inflammation</li> <li>3. Genetic diseases</li> <li>4. Immunopathology</li> <li>5. Environmental and nutritional pathology</li> </ol> <p>Students can obtain 12- 20 points from one colloquium</p>	
	Final exam	<div style="text-align: right;">min-max</div> <p>Oral part* points 13 - 23</p> <p>Practical part** points 13 - 23</p>	



		<p>classes):</p> <p>Attendance: 0.25 points</p> <p>Colloquium on missed exercise 0.25 points</p>												
18.	Criteria for grading (points / grade)	<table border="1"> <tr> <td>Up to 59 points</td> <td>5 (five) F</td> </tr> <tr> <td>from 60 to 68 points</td> <td>6 (six) E</td> </tr> <tr> <td>from 69 to 76 points</td> <td>7 (seven) D</td> </tr> <tr> <td>from 77 to 84 points</td> <td>8 (eight) C</td> </tr> <tr> <td>from 85 to 92 points</td> <td>9 (nine) B</td> </tr> <tr> <td>from 93 to 100 points</td> <td>10 (ten) A</td> </tr> </table>	Up to 59 points	5 (five) F	from 60 to 68 points	6 (six) E	from 69 to 76 points	7 (seven) D	from 77 to 84 points	8 (eight) C	from 85 to 92 points	9 (nine) B	from 93 to 100 points	10 (ten) A
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19.	Conditions for signature and for taking the final exam	<p><b>Conditional criteria:</b></p> <p><b>Conditions for a signature</b></p> <p>In order to get a signature, the student has to attend the theoretical lessons, practical exercises and the seminars, and to achieve at least minimum points (1+10 points).</p> <p><b>Conditions to take the final exam</b></p> <p>In order to take the final exam, the student has to</p>												

		<p>achieve at least a minimum points for each of the periodical evaluations separately (12+12 points), or get at least 30% of the total number of points provided for continuous check of knowledge (6+6 points); during the exam session the student must take an examination for the failed periodical evaluation(s) first, and afterwards the student may proceed to the final exam.</p> <p>The final grade is formed according to the grading table, based on the sum of the points earned from all activities, continuous checks of knowledge and the final exam.</p>			
20.	Teaching language	Macedonian			
21.	Method for monitoring the quality of lectures	Student`s anonymous evaluation of the subject, teachers and associates involved in the educational process.			
22.	Literature				
	Mandatory literature				
	No.	Author	Title	Publisher	Year
	1	Kumar V, Cotran RS, Robbins SL. Robbins	Basic Pathology. 7th ed.	W.B. Saunders Company, Philadelphia	2003
22.1	2	Винај Кумар, Абул Абас, Нелсон Фаусто, Ричард Мичел	Основи на патологијата според Робинс	Табернакул	2010
	3	Катедра по патологија – група автори	Избрани поглавја од Патологија 1	Медицински факултет, Скопје, УКИМ	2010
	4	Катедра по патологија – група автори	Практикум за хистопатолошки вежби	Медицински факултет, Скопје, УКИМ	2008
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22.2	Additional literature				

No.	Author	Title	Publisher	Year
1	Kumar V, Kotran RS, Robins SL.	Osnovi patologije. 5 izdanje	Školska knjiga, Zagreb,	1994
2	Kumar, Abbas, Fausto, Aster	Pathologic Basis of Disease, eight edition	Saunders	2010
3	Робинс и Котран	Патолошки атлас	Saunders Elsevier Академски печат	2006 2010
4	Робинс и Котран	Патолошка основа на болестите - 8 изд.	Арс Ламина- публикации	2015
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