

1.	Subject	PATHOPHYSIOLOGY 2		
2.	Code	OM 311		
3.	Study Program	General Medicine		
4.	Institution (Unit, Institute, Chair, Department)	Ss Cyril and Methodius University, Medical Faculty, Department of Pathophysiology		
5.	Degree of education (first or second cycle)	Integrated 6-year study		
6.	Study year/semester	Third (III) / Fifth (V)	7.Number of credits	4.5
8.	Responsible teacher	Prof. Daniela Pop Gjorcheva, PhD, MD		
9.	Preconditions	Exam of Physiology 1, Signature of Physiology 2, Signature of Pathophysiology 1		
10.	Teaching goals: To get introduced with mechanisms of initiation, course and outcome of heart and vascular, lung, kidney, digestive, liver and bile and endocrine disturbances			
11.	Brief content: Theoretical course <ul style="list-style-type: none"> • disturbances of cardiovascular system • disturbances of respiratory system • disturbances of renal system • disturbances of digestive system • disturbances of hepatobiliar system • disturbances of endocrine system Practical lessons: <ul style="list-style-type: none"> • experimental practices on experimental animals, demonstrations on students, presentation of in vitro and in vivo methods 			
12.	Methods of studying: Classic - Ex cathedra teaching and interactive teaching during lectures and practical trainings, independent study by using textbooks, computer assisted learning			
13.	Total available time:	135 classes		
14.	Organization of the course	60 classes - theoretical course, practical course 75 classes - home individual learning		
15.	Forms of teaching activities	15.1.	Theoretical course	30 classes
		15.2.	Practical course, Seminars	30 classes

16.	Other forms of activities		16.1.	Practice	/
			16.2.	Individual tasks	/
			16.3.	Individual (home) learning	75 classes
17.	Method of assessment				
	17.1	Tests	<p style="text-align: right;">min – max</p> <p>Continual assessment – 2 tests (written form)</p> <p>1. disturbances of cardiovascular, respiratory and renal systems</p>		
			<p style="text-align: right;">18 - 30 points</p> <p>2. disturbances of digestive, hepatobiliar , haematopoetic and endocrine systems 18 - 30 points</p> <p style="text-align: right;">18 - 30 points</p> <p>Final exam: final test + oral examination</p> <p>3. Final test: analysis of experimental models or tests for disorders detection 6 - 10 points</p> <p>4. Oral exam: theoretical discution for the application of experimental models or tests 6 - 10 points</p> <p>Complete exam - combination of the failed exam (written form) plus final test and final oral exam</p> <p>Full exam - combination of the two failed exams plus final test and final oral exaam</p>		
	17.2	Seminar paper/project (oral/written presentation)	/ - /		min – max

17.3	Active participation	<p>Students are obliged to follow actively all recommended activities, including participation in the continuous testing of knowledge in order to get signature</p> <p>Pointing of student's activities:</p> <p><u>Theoretical course (% of presence)</u></p> <ul style="list-style-type: none"> • min.30% 1 point • 31-70% 2 points • 71-100% 3-5 points <p><u>Practical</u> 10 - 15 points</p> <p>The grade in the final exam is given according to the grading table, and on basis of the sum of points obtained in all of the activities</p>	
18.	Grading criteria (points / grade)	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
19.	Requirement for signature and taking the final exam	<p>The student is required to actively follow all of the planned activities.</p> <p>Conditional criteria for assessment of knowledge: In order to get a signature, the student should obtain minimum points in both theoretical and practical courses.</p> <p>In order to take the final exam, the student should obtain the minimum points in the two continual assessments; If the student has not obtained the minimum points in the continual assessments, he/she will be obligated to pass them before the final exam.</p>	
20.	Language of instruction	Macedonian	
21.	Method of monitoring the quality of teaching process	Attendance of students to classes and interactive participation in theoretical and practical lessons.	
22.	Textbooks		
	22.1.	Mandatory	

		1.	Vaskova O, Miceva Ristevska S, Pop Gjorceva	Special pathological physiology	RC Copy, Medical	2012
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			D, Miladinova D, Loparska S, Majstorov V:		faculty, Skopje		
			Vaskova O, Miceva Ristevska S, Pop Gjorceva D, Miladinova D, Loparska S:	Practical course for general and special pathological physiology	Boro Grafika, Skopje	2013	
	22.2.	Additional					
		1.	Gamulin S et all:	Pathophysiology	Jumena Zagreb	2014	
		2.	Tadzer I et all:.	General pathological physiology	Medicinska knjiga, Beograd	1984	
		3.	McPhee SJ, Ganong WF:	Pathophysiology of disease. An introduction to clinical medicine	Langee medical Books/McGr aw-Hill, New York	2003	