Subject	LABORATORY DIAGNOSTICS IN PEDIATRICS					
Code	MLD – 213					
Study program:	Three-year professional studies of medical laboratory diagnostics					
Conducted by	UKIM – Medical Faculty					
	Department of Pediatrics					
Degree of	First cycle					
education (first or						
second cycle)						
Academic	II/III 7. Credits 2					
Professor	Department professors					
Prerequisite	None					
Goals	• The student will gain foundation theoretical knowledge of the subject					
Oouis	Pediatrics and Laboratory Diagnostic of pediatric pathology					
	Will become able to approach independently when performing					
	laboratory procedures in pediatrics					
Content summary:						
Theoretical lesson	us (20 lessons):					
 Good labor 	ratory practice					
 Ethics in la 	aboratory diagnostics					
 Normal her 	ematopoiesis					
Diagnostic	e methods in hematology					
 Disorders of 	of the endocrine system					
 Diabetes m 	ellitus in childhood – laboratory monitoring					
 Congenital 	heart problems, myocarditis and cardiomyopathy					
Autoimmu	Autoimmune disorders in childhood/specific diagnostic tests					
 Respiratory 	Respiratory system disorders					
 Intoxication 	n in children – laboratory diagnostic					
General cha evaluation	aracteristics of the immune system – and laboratory analyses for global immune					
 Diseases of 	the gut tract					
Dehvdratio	tions: laboratory tests					
Metabolic	disorders in newborns					
 CNS – function, most common disorders 						
Urinary tract disorders						
Characteris	Characteristics of the laboratory tests in neonatology					
• Electrolytes status						
• Laboratory diagnostic of children on intensive therapy						
Communic	• Communication skills in working with children of different ages					
Practical lessons (1	() lessons):					
• Evaluation	of peripheral smear and hone marrow smear					
Diagnostic	methods in pediatric oncology					
Laboratory	analyses and tests in endocrinology					
Snecific lab	boratory tests in pediatric cardiology					
Laboratory	diagnosis in case of respiratory insufficiency					
 Laboratory diagnosis in case of respiratory insufficiency Specific immunology tests for determining immunodeficiency 						
 Laboratory tests in case of abnormal liver function 						
	Subject Code Study program: Conducted by Degree of education (first or second cycle) Academic year/semester Professor Prerequisite Goals Content summary: Theoretical lesson Good labor Ethics in la Normal hes Diagnostic Diabetes m Good labor Ethics in la Normal hes Diagnostic Diabetes m Congenital Autoimmu Respiratory Intoxicatio General ch evaluation Diseases o Dehydratic Metabolic CNS – fun Urinary tra Characteris Electrolyto Electrolyto Communic Practical lessons (1 Evaluation Diagnostic Laboratory Specific la Laboratory Specific la Laboratory Specific la					

	• Laboratory analysis of metabolic disorders, evaluation of ABC									
	Laboratory analysis of cerebrospinal fluid									
	Laboratory diagnosis of kidney insufficiency									
12.	Teaching methods: Interactive theoretical lessons, seminars									
13.	Total classes:									
14.	Organization			-						
15.	15. Types of teaching activities		15.1	Lessons:	20					
				theoretical						
			15.0	Classes	10					
			13.2	Practical lessons,	10					
16	Other types of estivities		16.1	Training						
10.	16. Other types of activities		16.2	Self supporting						
			10.2	practice						
			16.3	Learning at home						
17	Knowledge asse	ssment	Points	Learning at nome						
17.	17 1	Mid-term exams	Points	$30 - 50 \min - \max$						
	17.2	Final exam	The ex	am is in a written for	m It consists of	the mid-term				
	17.2	i mui onum	exam t	hat the student didn't	pass.	the fine term				
	17.3	Paper/project (oral			F	Min. – Max.				
		presentation)	Theore	tical lessons		7.5 - 10				
		1 /	Practic	al lessons		12.5 - 20				
			Mid-te	rm exam		40 - 75				
			Total			60 - 100				
	17.4	Active participation				Min. – Max.				
			Theore	tical lessons		1 - 2				
			D /	al lessons		1 6				
			Practic			4 - 0				
18.	Grading	Up to 59	5 (five)) F		4 - 0				
18.	Grading criterion	Up to 59 60-68	5 (five) 6 (six)) F E		4 - 0				
18.	Grading criterion (points/grades)	Up to 59 60-68 69-76	Fractic 5 (five) 6 (six) 7 (seve) F E m) D		4 - 0				
18.	Grading criterion (points/grades)	Up to 59 60-68 69-76 77-84	5 (five) 5 (six) 7 (seve 8 (eigh) F E en) D t) C		4 - 0				
18.	Grading criterion (points/grades)	Up to 59 60-68 69-76 77-84 85-92	5 (five) 6 (six) 7 (seve 8 (eigh 9 (nine	b) F E en) D t) C) B		4 - 0				
18.	Grading criterion (points/grades)	Up to 59 60-68 69-76 77-84 85-92 93-100	Practic 5 (five) 6 (six) 7 (seve 8 (eight) 9 (nine) 10 (ten)) F E m) D t) C) B) A		4 - 0				
18.	Grading criterion (points/grades) Requirements	Up to 59 60-68 69-76 77-84 85-92 93-100 To obtain a signature an	5 (five) 6 (six) 7 (seve 8 (eigh 9 (nine) 10 (ten) F E en) D t) C) B) A the mid-term exam,	the student mus	t regularly				
18.	Grading criterion (points/grades) Requirements for obtaining a	Up to 59 60-68 69-76 77-84 85-92 93-100 To obtain a signature an attend the seminars and points from all the activ	5 (five) 6 (six) 7 (seve 8 (eigh 9 (nine 10 (ten d attend prepare	<pre>b) F E E en) D t) C) B) A the mid-term exam, a paper. The final gradients</pre>	the student mus ade is based on t	t regularly the sum of the				
18.	Grading criterion (points/grades) Requirements for obtaining a signature and attending the	Up to 59 60-68 69-76 77-84 85-92 93-100 To obtain a signature an attend the seminars and points from all the active	Practic5 (five)6 (six)7 (seve8 (eigh9 (nine10 (tennd attendpreparevities.) F E E m) D t) C) B) A the mid-term exam, a paper. The final gra	the student mus ade is based on	t regularly the sum of the				
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18.	Grading criterion (points/grades) Requirements for obtaining a signature and attending the final examination	Up to 59 60-68 69-76 77-84 85-92 93-100 To obtain a signature an attend the seminars and points from all the activ	Practic 5 (five) 6 (six) 7 (seve 8 (eigh 9 (nine 10 (ten nd attend prepare /ities.) F E en) D t) C) B) A the mid-term exam, a paper. The final gra	the student mus ade is based on t	t regularly the sum of the				
18.	Grading criterion (points/grades) Requirements for obtaining a signature and attending the final examination Language	Up to 59 60-68 69-76 77-84 85-92 93-100 To obtain a signature an attend the seminars and points from all the activ	Practic 5 (five) 6 (six) 7 (seve 8 (eigh 9 (nine 10 (ten nd attend prepare /ities.	b) F E E (m) D (t) C (t) C (t) B (t) A (the mid-term exam, a paper. The final grades)	the student mus ade is based on	t regularly the sum of the				
18. 19. 20. 21.	Grading criterion (points/grades) Requirements for obtaining a signature and attending the final examination Language Method of	Up to 59 60-68 69-76 77-84 85-92 93-100 To obtain a signature an attend the seminars and points from all the active Macedonian Students' anonymous e	Practic 5 (five) 6 (six) 7 (seve 8 (eigh 9 (nine 10 (ten nd attend prepare /ities.) F E E m) D t) C) B) A the mid-term exam, a paper. The final gra	the student mus ade is based on t	t regularly the sum of the				
18. 19. 20. 21.	Grading criterion (points/grades) Requirements for obtaining a signature and attending the final examination Language Method of evaluating the	Up to 59 60-68 69-76 77-84 85-92 93-100 To obtain a signature an attend the seminars and points from all the activ Macedonian Students' anonymous e who hold the lessons.	Practic 5 (five) 6 (six) 7 (seve 8 (eigh 9 (nine 10 (ten nd attend prepare vities.) F E E m) D t) C) B) A the mid-term exam, a paper. The final gra	the student mus ade is based on	t regularly the sum of the collaborators				
18. 19. 20. 21.	Grading criterion (points/grades) Requirements for obtaining a signature and attending the final examination Language Method of evaluating the quality of the	Up to 59 60-68 69-76 77-84 85-92 93-100 To obtain a signature an attend the seminars and points from all the active Macedonian Students' anonymous e who hold the lessons.	Practic 5 (five) 6 (six) 7 (seve 8 (eigh 9 (nine 10 (ten nd attend prepare /ities.	b) F E E (m) D (t) C (t) C (t) B (t) A (the mid-term exam, a paper. The final gradient (t) for the subjects, the paper of the subjects, the paper of the subjects and the subject and the subj	the student mus ade is based on t professors and c	t regularly the sum of the				
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18. 19. 20. 21. 22.	Grading criterion (points/grades) Requirements for obtaining a signature and attending the final examination Language Method of evaluating the quality of the lessons Literature:	Up to 59 60-68 69-76 77-84 85-92 93-100 To obtain a signature an attend the seminars and points from all the active Macedonian Students' anonymous e who hold the lessons.	Practic 5 (five) 6 (six) 7 (seve 8 (eigh 9 (nine 10 (ten nd attend prepare vities.) F E E m) D t) C) B) A the mid-term exam, a paper. The final gra	the student mus ade is based on a professors and c	t regularly the sum of the				
18. 19. 20. 21. 22.	Grading criterion (points/grades) Requirements for obtaining a signature and attending the final examination Language Method of evaluating the quality of the lessons Literature: 22.1	Up to 59 60-68 69-76 77-84 85-92 93-100 To obtain a signature and attend the seminars and points from all the active Macedonian Students' anonymous e who hold the lessons.	Practic 5 (five) 6 (six) 7 (seve 8 (eigh 9 (nine 10 (ten nd attend prepare /ities.) F E E en) D t) C) B) A the mid-term exam, a paper. The final grass n of the subjects, the p	the student mus ade is based on t professors and c	t regularly the sum of the collaborators				
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	22.2	Additional literature	