

1.	Subject	CLINICAL AND LABORATORY CORRELATIONS			
2.	Code	MLD – 322			
3.	Study program:	Three-year professional studies of medical laboratory diagnostics			
4.	Conducted by	UKIM – Medical faculty Department of Internal Medicine			
5.	Degree of education (first or second cycle)	First cycle			
6.	Academic year/semester	III/VI	7.	Credits	4
8.	Professor	Prof. d-r Viktorija Chalovska Ivanova			
9.	Prerequisite	Enrolled in third year			
10.	Goals	<ul style="list-style-type: none"> • To point out the importance of laboratory diagnostics and clinical practice. Special accent to the role of laboratory medicine in diagnosing, differentiation diagnosis, treatment and following the success of therapeutic procedures • Development of general and specific competences (knowledge and skills) for the subject and/or the module • To point out the importance of the collaboration between laboratory personnel and the doctors, since the constant communication provides benefits for the patient who is focal for clinical medicine. Introduction to different laboratory analyses which are of great importance in diagnostic and therapeutic procedure. 			
11.	Content summary:	<p>Theoretical lessons (45 lessons): The following clinical disciplines will be incorporated:</p> <p>Cardiology (7 lessons):</p> <ul style="list-style-type: none"> • Cardiological problems – heart and blood vessels and laboratory results in atherosclerosis and coronary heart diseases, heart failure, cardiomyopathy and hypertension. Getting acquainted with clinical entities: congestive heart diseases, heart weakness <p>Endocrinology (8 lessons):</p> <ul style="list-style-type: none"> • Endocrine diseases and metabolic disorders: laboratory results in diabetes mellitus, diseases of the adrenal gland, hyperlipidemia, thyroid and parathyroid gland problems. Getting acquainted with the clinical entities: diabetes mellitus and presentation of diabetic complications <p>Gastroentero-hepatology (12 lessons)</p> <ul style="list-style-type: none"> • Diseases of the gastrointestinal system: laboratory results in peptic ulcer, stomach cancer, chronic ulcer colitis, Crohn diseases, acute and chronic pancreatitis, pancreatic cancer, liver cirrhosis, acute hepatitis, chronic hepatitis, liver cancer, cholelithiasis and acute cholecystitis. Getting acquainted with the clinical entities: liver cirrhosis, ulcer disease, liver cancer, stomach cancer and pancreatic cancer. <p>Nephrology (10 lessons)</p> <ul style="list-style-type: none"> • Kidney disease and laboratory results in: acute and chronic kidney insufficiency, acute and chronic pyelonephritis, glomerulonephritis, nephrolithiasis, kidney cystic disease, nephrotic syndrome, hyper and hypokalemia. Getting acquainted with clinical entities: acute and 			

	chronic kidney insufficiency			
	Pulmonology (6 lessons) <ul style="list-style-type: none"> Lung diseases and laboratory results in: inflammation of the lungs, chronic obstructive lung disease and lung cancer. 			
	Toxicology (2 lessons) <ul style="list-style-type: none"> Urgent medicine and laboratory diagnosis, organization of hospital and infirmary departments, urgent medicine services and tasks for urgent laboratory. 			
12.	Teaching methods: Interactive theoretical lessons, paper			
13.	Total classes:	95		
14.	Organization			
15.	Types of teaching activities	15.1	Lessons: theoretical classes	30
		15.2	Practical lessons, seminars	15
16.	Other types of activities	16.1	Practice	15
		16.2		
		16.3	Learning at home	35
17.	Knowledge assessment		Points	
	17.1	Tests	50 – 80 points min.-max.	
	17.2	Paper/project (written and oral presentation)	5 – 10 points	
	17.3	Active participation	5 – 10 points	
18.	Grading criterion (points/grades)	Up to 50	5 (five) F	
		51-60	6 (six) E	
		61-70	7 (seven) D	
		71-80	8 (eight) C	
		81-90	9 (nine) B	
		91-100	10 (ten) A	
19.	Requirements for obtaining a signature and attending the final examination	To obtain a signature, the student must gain minimum points 60% in the mid-term exams.		
		To attend the final exam, the student must prepare a paper and a power point presentation.		
		The final grade is formed according to the grading criterion, and is based on the sum of the points of all the activities.		
20.	Language	Macedonian		
21.	Method of evaluating the quality of the lessons	Students' anonymous evaluation of the professors and lessons. The content of the lectures, the professors' preparation, clarity, availability of new content and other elements of the lessons are evaluated		
22.	Literature:			
	22.1	Mandatory literature		

	22.2	Additional literature	