

1.	Subject	MEDICAL INFORMATICS			
2.	Code	MLD – 318			
3.	Study program:	Three-year professional studies of medical laboratory diagnostics			
4.	Conducted by	UKIM – Medical faculty Department of Epidemiology and Biostatistics with Medical Informatics			
5.	Degree of education (first or second cycle)	First cycle			
6.	Academic year/semester	III/V	7.	Credits	3
8.	Professor	Head of the Department: Prof. d-r Vesna Velikj Stefanovska The lessons are held the following Department members: Prof. d-r Dragan Danilovski Prof. d-r Biljana Taushanova Prof. d-r Vesna Velikj Stefanovska Prof. d-r Rozalinda Isjanovska Prof. d-r Beti Zafirova Ivanovska Res. Assoc. d-r Irina Pavlovska			
9.	Prerequisite	Fulfilled condition for enrolment into third year			
10.	Goals	<ul style="list-style-type: none"> • Describing the general concepts of information technology and medical informatics • Listing the general computer parts • Recognizing software support necessary for computers • Using a computer for working on a text, tables data, presentations and general work procedures connected to proper data bases • Defining health information, their organization and protection • Describing health information systems • Describing laboratory information systems • Using a computer for communication and search the internet for data • Using information communication technologies on a daily basis in providing health care • Using computers in health care for personal and educational goals 			
11.	Content summary:	<p>Theoretical lessons:</p> <ul style="list-style-type: none"> • WINDOWS operating system, MS EXPLORER; MS WORD; MS EXCEL; MS POWER POINT; email. Internet, web search • Health/medical informatics: entity, attributes, data types, measurements, digital data organization, traits codex • World data bases and their search • Data safety and protection • Health information systems: principles, levels, problems • Telemedicine • Principles of laboratory information system <p>Practical lessons:</p> <ul style="list-style-type: none"> • Foundations of information technology • Biomedical data bases – sources, search, interpretation • Microsoft office: word • Microsoft office: excel 			

	• Microsoft office power point			
12.	Teaching methods: interactive theoretical lessons, practical lessons, seminars			
13.	Total classes:	45		
14.	Organization			
15.	Types of teaching activities	15.1	Lessons: theoretical classes	15
		15.2	Practical lessons	30
16.	Other types of activities	16.1	Laboratory training	
		16.2	Self-supporting practice	
		16.3	Learning at home	45
17.	Knowledge assessment		Points	
	17.1	Tests	Mid –term exams points 18 – 30 min.-max. The mid-term exams are 2 written tests The mid-term exam includes: Tasks from selected parts Microsoft office: word Microsoft office: excel Microsoft office: power point The student can gain from 9 to 15 points on one mid-term exam	
	17.2	Final exam	Oral part points 36 – 50 min.-max.	
	17.3	Active participation	Theoretical lessons points 1 – 5 min.-max. Practical lessons points 5 – 10 min.-max Theoretical lessons attendance 51-60% = 1 point 61-91% = 2 points 91-100% = 3 points Practical lessons (24 groups of practical lessons with duration of 3 hours)	
18.	Grading criterion (points/grades)	Up to 59	5 (five) F	
		60-68	6 (six) E	
		69-76	7 (seven) D	
		77-84	8 (eight) C	
		85-92	9 (nine) B	
		93-100	10 (ten) A	
19.	Requirements for obtaining a signature and attending the final examination	To obtain a signature, the student must gain minimum points from attending the theoretical and practical lessons. To attend the final exam, the student must pass the mid-term exams or gain minimum 30% of the total points. In the exam session, the student first attends the mid-term exams, if not passed, and then attends the final exam. The final grade is formed according to the grading criterion, and is based on the sum of the points of all the activities, mid-term exams and final exam.		
20.	Language	Macedonian		

21.	Method of evaluating the quality of the lessons	Students' anonymous evaluation of the subject, professors and collaborators who participate in the lessons.	
22.	Literature:		
	22.1	Mandatory literature	
		1.	Danilovski D., Orovchanec N., Vasilevska K., Taushanova B., Velikj Stefanovska V., Isjanovska R., Zafirova Ivanovska B., Pavlovska I. Medical Statistics and Informatics – three-year professional studies, University Ss. Cyril and Methodious, Medical Faculty, Skopje, 2015
		2.	Kern J., Petrovechki M., Medical Informatics, Medicinska Naklada Zagreb, 2009
		3.	Hercigonja-Szekeres M., Handbook of Medical Informatics, Zdravstveno sveleuchilishte, e-pages, Department of Informatics, Zagreb, 2012
		4.	Somek M., Informatics Handbook of informatics, Zdravstveno sveleuchilishte, e-pages, Department of Informatics, 2010
	22.2	Additional literature	
		1.	