1.	Subject	**SELECTED CHAPTERS OF CLINICAL MEDICINE (INTERNAL MEDICINE, INFECTIOUS DISEASES, CLINICAL TRAINING AND DIAGNOSTIC LABORATORY)**			
2.	Code	DA – 114			
3.	Study program:	Three-year professional studies for graduate obstetricians			
4.	Conducted by	UKIM – Medical faculty Department of Internal medicine, Department of Infectology			
5.	Degree of education (first or second cycle)	First cycle			
6.	Academic year/semester	First/I and II	7.	Credits	1.5 I semester 4.5 II semester
8.	Professor	Chair of the Department of Internal Medicine: Prof. Marija Vavlukis The classes are held by the following professors from the Department of Internal medicine: Prof. Snezana Mishevska – Perchinkova Prof. Georgi Bozinovski Prof. Dejan Dokikj Prof. Rozalinda Popova – Jovanovska Prof. Ljubica Georgievska – Ismail Prof. Tatjana Milenkovikj Prof. Nenad Joksimovikj Prof. Meri Trajkova Prof. Goce Spasovski Prof. Elizabeta Srbinovska – Kostovska Prof. Silvana Jovanova Prof. Sonja Genadieva – Stavrikj Prof. Magdalena Genadieva – Dimitrova Prof. Petar Dejanov Prof. Vesna Gerasimovska Prof. Zlatica Dimitrievikj – Gosheva Prof. Irena Kafedziska Prof. Marijan Boshevski Prof. Gjulshen Selim Prof. Vesna Ristovska Prof. Marija Vavlukis Prof. Snezana Markovikj – Temelkova Prof. Biljana Gerasimovska – Kitanovska Prof. Kalina Grivcheva – Stardelova Prof. Lidija Petkovska Prof. Hristo Pejkov Doc. Lidija Poposka Doc. Vladimir Andreevski Doc. Sasha Mishevska – Jovanovska Doc. Pavlina Djekova – Vidimliski Doc. Jorgo Kostov Chair of the Department of Infectology: Prof. Irena Kondova Topuzovska			

		The classes are held by the following memebers of the department: Prof. Irena Kondova Topuzovska Prof. Snezana Kostovska Prof. Zvonko Milenkovikj Prof. Mile Bosilkovski Prof. Krsto Grozdanovski Doc. Maja Cvetanovska
9.	Prerequisite	No
10.	Goals	**Internal Medicine:** • Learn about certain diseases, their diagnosis and treatment • Learn to use the theoretical knowledge in clinical training **Infectology** • Gain theoretical knowledge in infectology, which will enable the student to recognize infectious diseases, treat them and prevent serious consequences • Have the ability to use theoretical knowledge about diagnosis, treatment and prevention of infectious diseases in clinical training **Clinical training and dignostic laboratory:** • The importance of dignostic laboratory and clinical training. Special attention is paid to pregnant women, diagnosis and treatment of pregnancy complications. • Developing basic and specific knowledge and skills for the subject • To learn the importance of colaboration between obstetricians and doctors with the laboratories, because constant good communication is beneficial for the patients. Introducing different laboratory analysis which are extremely important in the diagnostic and therapeutic procedure.
11.	Content summary: **Internal medicine:** Theoretical lessons: 60 classes **Clinical examination of a patient (1 class)** **Cardiology (13 classes):** Approach towards a patient with cardiologic condition (anamnesis, physical examination, diagnostic procedures Coronary artery disease Acute coronary syndrome Weakened heart muscle Heart rhythm problems Sudden cardiac arrest Congenital heart defects Endocarditis Myocarditis and pericarditis Cardiomyopathies Circulation problems Pulmonary hypertension Pulmonary embolism **Pulmonology (10 classes)** Approach towards a patient with a respiratory problem (anamnesis, physical examination, diagnostic procedures) Acute and chronic bronchitis Emphysema Bronchiectasis	

	Chronic obstructive pulmonary disease COPD Asthma Interstitial lung disease Tumors Disorders of the pleura Acute respiratory distress syndrome **Reumatology (8 classes)** Approaching the patient (anamnesis, physical examination, diagnostic procedures) Rheumatic fever Rheumatoid arthritis Ankylosing spondylitis Other types of arthritis Connective tissue diseases Degenerative rheumatic diseases Metabolic bone diseases **Endocrinology (6 classes)** Approaching the patient (anamnesis, physical examination, diagnostic procedures) Thyroid and parathyroid condititions Adrenal gland disorder Disorders of the pituitary gland **Gastroenterohepatology (6 classes)** Approaching the patient (anamnesis, physical examination, diagnostic procedures) Diseases of the stomach Gastrointestinal diseases Liver diseases Disorders of the pancreas and gallbladder ducts **Nephrology (6 classes)** Approaching the patient (anamnesis, physical examination, diagnostic procedures) Acute and chronic urinary tract infections Glomerulonephrititis Tubulopathies Acute and chronic kidney failure Secondary arterial hypertension **Hematology (5 classes)** Approaching the patient (anamnesis, physical examination, diagnostic procedures) Anemia Leukemias Lymphoma Myeloproliferative disorders **Emergency medicine (2 classes)** Apporoaching an emergency patient (shock, conditions, cardiopulmonary arrest, metabolic crisis **Toxicology (3 classes)** Approaching the patient (anamnesis, physical examination, dignostic procedures) Drug toxicity **Infectology:** **Theoretical lessons:** Etiology, pathogenesis and clinical characteristics of infectious diseases Diagnostic protocol Antimicrobial therapy Immunisation, seroprophylaxis and immunoproprhylaxis Sepsis and septic shock

	Streptoccocal and staph infections, diphtheria, mononucleosis Salmonellosis, dysentery, amebiasis, food poisoning, traveler's diarrhea, viral enterocolitis Pneumonia, legionella, chlamydia, mycoplasma, pertussis Bacterial and serious meningitis, meningoencephalitis and encephalitis Tetanus, botulism, rabies Anthrax, plague, tularemia, toxoplasmosis Brucellosis, malaria Spirochetes infections, rickettsia Hemorrhagic fever Variola, varicella, measles, rubella, herpes simplex virus Influenza, adenovirus, parotitis Poliovirus, enterovirus HIV, systemic fungal infections Nosocomial infections **Clinical practice and diagnostic laboratory** **Theoretical lessons: 45 lessons** Cardiology (7 classes) Cardiovascular diseases – the heart and the blood vessels, and laboratory results in case of myocarditis, pericarditis, coronary heart disease, heart defects, cardiomyopathy and hypertension. Diseases of the circulatory system. Getting acquainted with clinical entities: heart arrhythmia, congenital heart disease, coronary heart disease Endocrinology (8 classes) Endocrine and metabolic disorders: laboratory results in case of diabetes melitus and complications, diabetes and pregnancy, adrenal gland disorders, thyroid and parathyroid condititions. Getting acquainted with clinical entities: diabetes melitus, diabetic ketoacidosis, hypersmolar coma, hypoglycemia. Gastroenterohepatology (12 classes) Diseases of the gastrointestinal tract: laboratory results in case of peptic ulcer disease, hyperemesis gravidarum, liver disorders in pregnancy (acute fatty liver, pregnancy-associated idiopathic cholestasis, preeclampsia and liver disorders, HELLP, cirrhosis and portal hypertension in pregnancy, drug induced liver injury), ulcerative colitis, Crohn's disease, acute and chronic pancreatitis, acute and chronic autoimmune hepatitis, hepatitis B, C and D, cholestasis, fatty liver and steatohepatitis, cholelithiasis and acute cholecystitis. Getting acquainted with the clinical entities: autoimmune hepatitis, hepatitis, nonalcoholic steatohepatitis, primary biliary cholangitis, cirrhosis and portal hypertension, varicose veins bleeding, HELLP syndrome in pregnancy (hemolysis, elevated liver enzymes and thrombocytopenia), ulcer disease with complications, cholelithiasis and complications, inflammatory bowel disease. Nephrology (6 classes) Kidney diseases and laboratory results in case of: renal insuficiency, acute and chronic pyelonephritis, glomerulonephrititis, nephrolithiasis, polycycstic kidney disease, nephrotic syndrome, hyper- and hypokalemia. Getting acquainted with the clinical entities: acute and chronic renal insuficiency Pulmology (6 classes) Lung diseases and laboratory results in case of: pneumonia, bronchial asthma, chronic obstructive pulmonary disease. Toxicology (2 classes) Emergency medicine and labarotory diagnosis, organization of hospital and infirmary departments, emergency service and tasks for urgent laboratories.	
12.	Teaching methods: Interactive classes	
13.	Total classes:	50 classes internal medicine 50 classes clinical practice and dignostic laboratory

		20 classes infectology			
14.	Organization				
15.	Types of teaching activities		15.1	Lessons: theoretical classes	50 classes internal medicine 20 classes infectology 20 classes clinical practice and diagnostic laboratory
			15.2	Practical lessons (laboratory, clinical), seminars, team work	35 classes clinical practice and dignostic laboratory
			16.1	Learning at home	55 classes internal medicine 40 classes infectology
17.	Knowledge assesment		Points		
	17.1	Tests	Min.-max. Regular checks of knowledge Regular checks of the knowledge (mid-term exam)		
	17.2	Final exam	Oral part		
	17.3	Paper/project (oral/written presentation)	Papers		
	17.4	Active participation	Theoretical lessons		
			Practical lessons Practical lessons attendance 51%-60% 61%-91% = 2 points 91% - 100% = 3 points Practical lessons (24 groups of lessons with the duration of 3 hours)		
18.	Grading criterion (points/grades)	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.	Requirements for obtaining a signature and attending the final examination	To obtain a signature, the student must gain minimum points from visiting the theoretical lessons. The student must regularly attend the theoretical and practical lessons so that he can attend the mid-term exam. The exam is in a written form (multiple choice). The student must attend the mid-term exam in order to obtain a signature at the end of the semester. **The student must obtain minimum points (60%) on both the mid-term exams, which allows for a grade to be formed.** If the student passes one of the two mid-term exams, he should attend the final exam. The final grade for the subject is formed according to the table for grading, and is based on the sum of the points from all the activities, mid-term exams and final			

		exam.	
20.	Language	Macedonian	
21.	Method of evaluating the quality of the lessons	Anonymous student evaluation of the subject, the professors and the collaborators who hold the lessons.	
22.	Literature		
	22.1	Mandatory literature	
		1.	Handbook of clinical medicine (translation), J.Flen, Ars Lamina, 2007
		2.	Selected chapters of internal medicine, Serafimovski V., Kumanovo: Makedonska riznica, 2003
		3.	Infectious diseases, tome 1 and 2, Jonathan Khoen, William J. Pauderly, Tabernakul, 2012
		4.	Infectious diseases, Dimitriev Dimitar, Ivanovski Ljubomir, Milenkovikj Zvonko, Grunevska Violeta, Kondova Topuzovska Irena, Stojkovska, Univerity „Ss.Cyril and Methodius", Medical Faculty, Skopje, 2012