

1.	Subject	IMMUNOLOGY			
2.	Code	MLD – 222			
3.	Study program:	Three-year professional studies of medical laboratory diagnostics			
4.	Conducted by	UKIM Medical Faculty – Skopje Department of Immunology			
5.	Degree of education (first or second cycle)	First cycle			
6.	Academic year/semester	First/I	7.	Credits	4
8.	Professor	Head of the Department: prof. d-r Meri Kirjas *the lessons are held by all the members of the Department			
9.	Prerequisite				
10.	Goals	<ul style="list-style-type: none"> • Understanding the structure and the function of the immune system • Gaining elementary knowledge about the basics of clinical immunology • Gaining knowledge about the immunology laboratory methods • Performing the elementary immunology laboratory methods • Gaining knowledge about microscopy • Gaining elementary knowledge about HLA typing • Gaining elementary knowledge about identifying antibodies • Gaining elementary knowledge of the immunology laboratory system of quality 			
11.	Content summary:	<p>Theoretical lessons:</p> <ul style="list-style-type: none"> • Innate immune response • Complement • Acquired immune response • Immunogens and antigens • Antigens presentation • B cells and antibodies • T cells • Major histocompatibility complex • Immune system activation and cytokines • Toleration and autoimmunity • Hypersensitivity reaction • Immunodeficiencies • Tumor immunology • Transplant immunology • Immunization and infectious diseases <p>Seminars:</p> <ul style="list-style-type: none"> • Innate and acquired immune response • Foundations of clinical immunology • Hypersensitivity reaction • Transplant immunology 			
12.	Teaching methods:	Interactive classes, seminars			
13.	Total classes:	60			
14.	Organization	15 theoretical lessons			

			30 practical lessons 15 lessons – seminars
15.	Types of teaching activities	15.1	Lessons: theoretical classes
		15.2	Practical lessons
			Seminars
16.	Other types of activities	16.1	Practice
		16.2	Self-supporting practice
		16.3	Learning at home
17.	Knowledge assesment		Points
	17.1	Mid-term exams	Min.-max. First mid-term exam Second mid-term exam
	17.2	Final exam	Min.-Max. Final (oral) exam Integrated final oral exam
	17.3	Paper/project (oral presentation)	Min. – Max. 1 - 2.5 Preparing a paper on a given subject and oral presentation of it.
17.4	Theoretical and practical lessons	Min. – Max. Points 19.5 - 32.5	
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 and participating in seminars. The grade is based on the sum of the points of all the activities, mid-term exams, seminars 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.	Kubi., Immunology (selected chapters); Tabernakul, skopje, 2011
		2.	Department of Immunology. Authorized lectures.
		3.	Practicum of Immunology, group of authors, Medical Faculty – Skopje, 2006
	4.	Analysis of Immunology Cases, Group of authors, Medical Faculty, Skopje, 2007	

