

LABORATORY RESEARCH IN IMMUNOLOGY

1	Course Title:	LABORATORY RESEARCH IN IMMUNOLOGY	
2	Course Code:	TİM6004	
3	Type of Course:	Optional	
4	Level of Course:	Third Cycle	
5	Year of Study:	1	
6	Semester:	2	
7	ECTS Credits Allocated:	8.00	
8	Theoretical (hour/week):	0.00	
9	Practice (hour/week):	6.00	
10	Laboratory (hour/week):	0	
11	Prerequisites:	None	
12	Language:	Turkish	
13	Mode of Delivery:	Face to face	
14	Course Coordinator:	Prof. Dr. BARBAROS ORAL	
15	Course Lecturers:	Prof.Dr. Ferah Budak, Prof.Dr. Arzu Yılmaztepe Oral	
16	Contact information of the Course Coordinator:	Prof. Dr. H. Barbaros ORAL Bursa Uludağ Üniversitesi, Tıp Fakültesi, İmmünoloji Anabilim Dalı, 16059, Nilüfer, BURSA E-posta: oralb@uludag.edu.tr Tel: 2954114	
17	Website:		
18	Objective of the Course:	The aim of this course is to provide the student knowledge required for performing and evaluating advanced immunological methods.	
19	Contribution of the Course to Professional Development:	To gain knowledge and skills needed for application of immunological laboratory tests used in research	
20	Learning Outcomes:		
		1	To gain knowledge and skills needed for application of immunological laboratory tests used in routine and research
		2	To gain knowledge and skills needed for the evaluation of immunological laboratory tests used in routine and research
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21	Course Content:		
		Course Content:	
Week	Theoretical	Practice	
1		Fluorescent microscope and its usage	

2		ANA, AMA , ASMA tests: Application, evaluation and reporting
3		Endomysium and gliadin tests: Application, evaluation and reporting
4		ANCA and Thyroid antibody tests: Application, evaluation and reporting
5		ANA profile immunoblotting tests: Application, evaluation and reporting
6		Immunofixation electrophoresis test: Application, evaluation and reporting
7		SSO-PCR HLA typing: Application, evaluation and reporting
8		Panel reactive antibody screening ve specific tests: Application, evaluation and reporting
9		SSP-PCR HLA typing: Application, evaluation and reporting
10		CDC total lymphocyte cross-match: Application, evaluation and reporting
11		Quantitative RT-PCR application and quantitation of realtive gene expression

Activites	Number	Duration (hour)	Total Work Load (hour)
13 Theoretical	10	0.00	0.00
Practicals/Labs	14	6.00	84.00
14 Self study and preperation	14	7.00	98.00
Homeworks	5	10.00	50.00
Projects	1	0.00	0.00
Materials:	1	0.00	0.00
Field Studies	0	0.00	0.00
Midterm exams	1	0.00	0.00
Others	0	0.00	0.00
Final Exams	1	0.00	0.00
Total Work Load			242.00
Total work load/ 30 hr			8.07
ECTS Credit of the Course			8.00

TERM LEARNING ACTIVITIES	NUMBER	WEIGHT
Midterm Exam	0	0.00
Quiz	0	0.00
Home work-project	5	50.00
Final Exam	1	50.00
Total	6	100.00
Contribution of Term (Year) Learning Activities to Success Grade		50.00
Contribution of Final Exam to Success Grade		50.00
Total		100.00

Measurement and Evaluation Techniques Used in the Course

Measurement and evaluation are performed according to the Rules & Regulations of Bursa Uludağ University on Undergraduate Education.

24 ECTS / WORK LOAD TABLE

25

CONTRIBUTION OF LEARNING OUTCOMES TO PROGRAMME QUALIFICATIONS

	PQ1	PQ2	PQ3	PQ4	PQ5	PQ6	PQ7	PQ8	PQ9	PQ10	PQ11	PQ12	PQ13	PQ14	PQ15	PQ16
ÖK1	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0
ÖK2	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0

LO: Learning Objectives PQ: Program Qualifications

Contribution Level:	1 very low	2 low	3 Medium	4 High	5 Very High
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