

<b>Course Description</b>					
<b>Name</b>	<b>Code</b>	<b>Semester</b>	<b>T+A Hour</b>	<b>Credit</b>	<b>ECTS</b>
ADVANCED IMMUNOLOGY II	MKBD1223430	Spring Semester	2+0	2	10
<b>Prerequisites Courses</b>					
<b>Recommended Elective Courses</b>					
<b>Language of Instruction</b>	Turkish				
<b>Course Level</b>	Third Cycle (Doctorate Degree)				
<b>Course Type</b>	Required				
<b>Course Coordinator</b>	Assist.Prof. Özlem GÜVEN				
<b>Name of Lecturer(s)</b>	Prof.Dr. Ayşegül ÇOPUR ÇİÇEK, Assist.Prof. Özlem GÜVEN				
<b>Assistant(s)</b>					
<b>Aim</b>	The aim of the course is to learn the method of working with the organs, cells and molecules of the immune system, and the pathological conditions that may arise from the immune system.				
<b>Course Content</b>	This course contains; Memory in T cell response (CD4),Memory in T cell response (CD8),Antigen presentation and antigen presenting cells, mechanistic approach,B cell development-1,B cell development -2 and memory response formation,Lymphoid organ formations 1,Lymphoid organ formations 2,Cellular and humoral immune response in acute viral infections,Cellular and humoral immune response in chronic viral infections,Cellular and humoral immune response in cancers,Cellular and humoral immune response in autoimmune diseases.				
<b>Course Learning Outcomes</b>			<b>Teaching Methods</b>	<b>Assessment Methods</b>	
This lesson; Introduction to immunology, Innate Immunology, Major Histocompatibility Complex (MHC) and Antigen Presentation, Antigen Recognition in the Adaptive Immune System, Humoral Immune Response, Tolerance and Autoimmunity, Tumor immunology, Transplantation Immunology, Allergy and hypersensitivity, Immunodeficiencies, Vaccines; Includes topics.			10, 16, 17, 18, 2, 9	A, E	
<b>Teaching Methods</b>	10: Discussion Method, 16: Question - Answer Technique, 17: Experimental Technique, 18: Micro Teaching Technique, 2: Project Based Learning Model, 9: Lecture Method				
<b>Assessment Methods</b>	A: Traditional Written Exam, E: Homework				
<b>Lecture Schedule</b>					
<b>Sequence</b>	<b>Topics</b>	<b>Preliminary Preparation</b>			
1	Memory in T cell response (CD4)				
2	Memory in T cell response (CD8)				
3	Antigen presentation and antigen presenting cells, mechanistic approach				
4	B cell development-1				
5	B cell development -2 and memory response formation				
6	Lymphoid organ formations 1				
7	Lymphoid organ formations 2				
8	Cellular and humoral immune response in acute viral infections				
9	Cellular and humoral immune response in chronic viral infections				
10	Cellular and humoral immune response in cancers				
11	Cellular and humoral immune response in autoimmune diseases				
<b>Evaluation Methods</b>		<b>Weight(%)</b>			
Midterm Exam		50			
General Exam		50			

<b>Resources</b>
1. Cellular and Molecular Immunology (10th Edition), Abul K. Abbas et al. 2. Kuby Immunology (8th Edition), Jenni Punt et al. 3. Roitt's Essential Immunology (13th edition), Peter J. Delves et al. 4. Articles