

Course Description					
Name	Code	Semester	T+A Hour	Credit	ECTS
ADVANCED IMMUNOLOGY I	MKBD1114480	Fall Semester	2+0	2	10
Prerequisites Courses					
Recommended Elective Courses					
Language of Instruction	Turkish				
Course Level	Third Cycle (Doctorate Degree)				
Course Type	Required				
Course Coordinator	Assist.Prof. Deniz DURALI				
Name of Lecturer(s)	Assist.Prof. Deniz DURALI				
Assistant(s)					
Aim	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.				
Course Content	This course contains; Introduction to immunology, Innate Immunity, Major Histocompatibility Complex (MHC) and Antigen Presentation, Antigen Recognition in the Adaptive Immune System, Cellular immune response, Humoral immunity, Tolerance and Autoimmunity, Transplantation Immunology, Allergy and hypersensitivity, Immunodeficiencies, Tumor immunology, Vaccines.				
Course Learning Outcomes			Teaching Methods	Assessment Methods	
The functioning of the immune system in physiological and pathological situations will be learned.			10, 16, 17, 18, 2, 9	A, E	
Teaching Methods	10: Discussion Method, 16: Question - Answer Technique, 17: Experimental Technique, 18: Micro Teaching Technique, 2: Project Based Learning Model, 9: Lecture Method				
Assessment Methods	A: Traditional Written Exam, E: Homework				
Lecture Schedule					
Sequence	Topics	Preliminary Preparation			
1	Introduction to immunology				
2	Innate Immunity				
3	Major Histocompatibility Complex (MHC) and Antigen Presentation				
4	Antigen Recognition in the Adaptive Immune System				
5	Cellular immune response				
6	Humoral immunity				
7	Tolerance and Autoimmunity				
8	Transplantation Immunology				
9	Allergy and hypersensitivity				
10	Immunodeficiencies				
11	Tumor immunology				
12	Vaccines				
Evaluation Methods		Weight(%)			
Midterm Exam		50			
General Exam		50			

Resources
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. Makaleler