



## AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Immunoparasitology							
Course Code		MBTK638		Course Level		Third Cycle (Doctorate Degree)			
ECTS Credit	10	Workload	247 ( <i>Hours</i> )	Theory	2	Practice	2	Laboratory	0
Objectives of the Course		The aim of this course is to have information about the antigenic structures of parasites separately, humoral and cellular immun response against parasites							
Course Content		the antigenic structures of parasites, humoral and cellular immun response, antibodies							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Discussion, Individual Study					
Name of Lecturer(s)									

### Assessment Methods and Criteria

Method	Quantity	Percentage (%)
Midterm Examination	1	40
Final Examination	1	60

### Recommended or Required Reading

1	Özcel MA, İnci A, Turgay N, Köroğlu E editors. Tıbbi ve veteriner immünoparazitoloji. Gzmir: Türkiye Parazitoloji Derneği Yayınları No:21, 2007. p. 563-75
2	Lawrence RA, Orihel TC (eds) 1987. Parasites: a guide to laboratory procedures and identification.ASCP press. Chicago. ISBN 0-89189-231-1 p:18-28.

Week	Weekly Detailed Course Contents	
1	Theoretical	Ambiosis and immunology
2	Theoretical	Giardiosis and immunology
3	Theoretical	Trichomoniasis and immunology
4	Theoretical	Crptosporidiosis, Cyclosporiosis and Immunology
5	Theoretical	Microporidiosis and immunology
6	Theoretical	Malaria and immunology
7	Theoretical	Trypanosomiasis and immunology
8	Intermediate Exam	Midterm exam
9	Practice	Leishmaniasis and immunology
10	Practice	Toxoplasmosis and immunology
11	Practice	Immunity in trematods
12	Practice	Immunity in cestodes
13	Practice	Immunity in nematodes
14	Theoretical	Immunity in arthropods
15	Final Exam	Final exam

### Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	13	0	2	26
Lecture - Practice	13	0	2	26
Assignment	5	0	15	75
Term Project	3	0	8	24
Laboratory	5	0	4	20
Individual Work	13	0	4	52
Quiz	6	0	3	18
Midterm Examination	1	0	3	3



Final Examination	1	0	3	3
Total Workload (Hours)				247
[Total Workload (Hours) / 25*] = ECTS				10
*25 hour workload is accepted as 1 ECTS				

### Learning Outcomes

1	Be able to have information about the general principles of antigen and antibody
2	Be able to have information about the relationship between immune system and vaccination
3	Be able to apply the information acquired from this course to the other fields of parasitology
4	Be able to have information about the general principles of antigen and antibody
5	Be able to have information about the relationship between immune system and vaccination

### Programme Outcomes (Molecular Biotechnology( English) Interdisciplinary Doctorate)

1	Ability to identify, analyze and understand problems related to molecular biotechnology and finding valid conclusions with basic knowledge in biotechnology
2	Ability to appropriately use laboratories and their associated equipment as part of research and observation activities through various branches of sciences
3	Ability to understand and interpret biological processes at cell, tissue, organ, system and organism levels
4	Ability to decide and apply appropriate tools and techniques in biotechnological manipulation
5	Ability to comprehend fundamentals of genetics and molecular biology and carry out basic methods in relevant applications
6	Ability to apply the fundamentals of protein and DNA chemistry, and immunology to techniques in biotechnology
7	Ability to understand and practice basics of applied biotechnology, with acquired knowledge on problem solving approaches
8	Ability to understand and interpret basics of molecular applications within medical, agriculture, veterinary and forensic sciences
9	Ability to perceive biological existence at the global and regional scales, together with comprehension of associated problems
10	Acquiring appropriate knowledge in the field of basic sciences to support perception, analysis and interpretation of biological facts, and ability to use and practice relevant methods for this goal
11	Ability to develop proficiency in laboratory management, including maintenance of an orderly work environment, inventory and ordering, and set up or maintenance of equipment
12	Ability to learn essential methods in microbiology and basic skills in a microbiology laboratory
13	Ability to demonstrate proficiency with standard techniques in liquid measurement, recombinant DNA technology, protein purification and identification, and cell culture

### Contribution of Learning Outcomes to Programme Outcomes 1:Very Low, 2:Low, 3:Medium, 4:High, 5:Very High

	L1	L2	L3
P1	5	5	5
P2	5	5	5
P3	3	3	3
P4	5	5	4
P5	5	5	4
P6	3	3	3
P7	4	4	5
P8	4	4	5
P9	4	4	5
P10	4	4	5
P11	3	3	3
P12	3	3	3
P13	5	5	5

