



## AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Molecular Epidemiology of Parasites							
Course Code		MBTK625		Course Level		Third Cycle (Doctorate Degree)			
ECTS Credit	8	Workload	199 ( <i>Hours</i> )	Theory	2	Practice	2	Laboratory	0
Objectives of the Course		The aim of this course is to give information about the genotype distribution of human parasites both local and global level							
Course Content		Blastocystis, Giardia, Entamoeba genotypes, incidence, prevalence							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Experiment, Discussion, Individual Study					
Name of Lecturer(s)		Ins. Asude Gülçe ORYAŞIN							

### Assessment Methods and Criteria

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

### Recommended or Required Reading

1	Moleküler Parazitoloji. Özcel MA, Tanyüksel M, Eren H. (Editörler) Türkiye Parazitoloji Derneği Yayını No:22, 2009
2	2. Parazit Hastalıklarında Tanı. Özcel MA, Korkmaz M, Ok UZ (Editörler) Türkiye Parazitoloji Derneği Yayını No:23, 2011 Eğitim Basımevi

Week	Weekly Detailed Course Contents	
1	Theoretical	Course introduction
2	Theoretical	Epidemiology concept
3	Theoretical	Molecular epidemiology and public health
4	Practice	Methods
5	Theoretical	The role in prevention of parasites
6	Practice	Databases search
7	Theoretical	Giardia molecular epidemiology
8	Intermediate Exam	Midterm exam
9	Theoretical	Plasmodium molecular epidemiology
10	Practice	Blastocystis molecular epidemiology
11	Practice	Molecular epidemiology of helminths
12	Practice	Cyst hydatid molecular epidemiology
13	Theoretical	The importance of genotypes during outbreaks
14	Practice	Molecular epidemiology problems
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	4	0	15	60
Term Project	3	0	6	18
Individual Work	13	0	3	39
Quiz	6	0	4	24
Midterm Examination	1	0	3	3



Final Examination	1	0	3	3
Total Workload (Hours)				199
[Total Workload (Hours) / 25*] = ECTS				8
*25 hour workload is accepted as 1 ECTS				

### Learning Outcomes

1	Be able to have knowledge about the molecular epidemiology of parasites
2	Be able to compare the genotypes in different regions in Turkey
3	. Be able to understand the aims of genotyping studies
4	Be able to understand the relationship between genotype distributions and phenotypes of parasites
5	Be able to understand the aims of genotyping studies

### 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 labortaory
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	L4
P1	5	5	5	5
P2	5	5	5	5
P3	3	3	3	3
P4	5	5	4	4
P5	5	5	4	4
P6	3	3	3	3
P7	4	4	5	5
P8	4	4	5	5
P9	4	4	5	5
P10	4	5	4	5
P11	4	5	4	4
P12	3	3		3
P13		4	4	3

