



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Vaccines in Parasitology							
Course Code		MBTK627		Course Level		Third Cycle (Doctorate Degree)			
ECTS Credit	8	Workload	198 (<i>Hours</i>)	Theory	2	Practice	0	Laboratory	0
Objectives of the Course		The aim of this course is to give information about the vaccines that are being developed against the parasites that cause human infections							
Course Content		General characteristics of vaccines, vaccine side effects, malaria and vaccination studies, hydatid cyst and vaccination studies, Leishmania and vaccination studies							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Discussion, Individual Study					
Name of Lecturer(s)		Prof. Bülent BOZDOĞAN							

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	Parazit Hastalıklarında Tanı. Özcel MA, Korkmaz M, Ok UZ (Editörler) Türkiye Parazitoloji Derneği Yayını No:23, 2011

Week	Weekly Detailed Course Contents	
1	Theoretical	Course introduction
2	Theoretical	Vaccine components
3	Theoretical	Activity of vaccinations
4	Theoretical	Safety of vaccinations
5	Theoretical	Vaccine development work and challenges
6	Theoretical	Cross-sectional studies and vaccine development
7	Theoretical	Cost and vaccination
8	Intermediate Exam	Mid term exam
9	Theoretical	Plasmodium vaccine studies
10	Theoretical	Leishmania vaccination studies
11	Theoretical	Cyst hydatid vaccine studies
12	Theoretical	Toxoplasma vaccination studies
13	Theoretical	Cryptosporidium vaccine studies
14	Theoretical	Vaccine studies in other parasites
15	Final Exam	Final exam

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	13	0	2	26
Assignment	4	0	15	60
Term Project	6	0	6	36
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)				198
[Total Workload (Hours) / 25*] = ECTS				8

*25 hour workload is accepted as 1 ECTS



Learning Outcomes

1	Be able to understand the basics of vaccines in parasitic diseases
2	Be able to have knowledge about vaccination studies at the site.
3	Be able to have knowledge about the difficulties encountered in the development of vaccines
4	Be able to learn the basic features of vaccinations
5	Be able to learn the efficacy ratios and protection of vaccines.

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	L5
P1	5		5		5
P2	5	5	3		5
P3	3	3	3	3	3
P4	5	5	4	4	4
P5	5	5	4	4	4
P6	3	3	3	3	3
P7	4	4	5	5	5
P8	4		5	5	5
P9	4	4	5	5	5
P10	4	4	5	5	5
P11	3	3	3	3	3
P12				3	3
P13	5	5	5		5

