AYDIN ADNAN MENDERES UNIVERSITY
GRADUATE SCHOOL OF HEALTH SCIENCES
MEDICAL BIOLOGY
MEDICAL BIOLOGY
MEDICAL BIOLOGY MASTER
COURSE INFORMATION FORM

Course Title	Molecular Cell Biology II								
Course Code	TIB503		Couse Level		Second Cycle (Master's Degree)				
ECTS Credit	5	Workload	126 *(Hours)*	Theory	3	Practice	0	Laboratory	0
Objectives of the Course	Basic molecular cellular bioiogy education								
Course Content	YokNucleic acids, structure of DNA and RNA, DNA synthesis in prokaryotes and ve eukaryotes, transfer of genetic information in bacteris, gene and genomik organization, transcription and the mechanisims of transcriptional control in prokaryotes and eukaryotes, protein synthesis, and posttranslational modifications.								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Discussion, Case Study								
Name of Lecturer(s)	Assoc. Prof. Gizem DÖNMEZ YALÇIN								

Assessment Methods and Criteria		
Method	Quantity	Percentage (%)
Midterm Examination	1	40
Final Examination	1	60

Recommended or Required Reading	
1	Molecular Cell Biology – Harvey Lodish, Arnold Berk, Chris A. Keiser, Monty Krieger, Anthony Bretscher, Hidde Ploegh, Angelika Amon, Mathew P. Scott - W. H. Freeman; Seventh Edition edition (May 2, 2012)

Week	Weekly Detailed Course Contents	
1	Theoretical	Nucleic Acids
2	Theoretical	DNA and RNA structure
3	Theoretical	Prokaryotic and Eukaryotic DNA synthesis
4	Theoretical	Transfer of genetic information in prokaryotes
5	Theoretical	Genes and genomic organisation
6	Theoretical	Genes and genomic organisation
7	Theoretical	Transcription in prokaryotes
8	Intermediate Exam	Midterm exam
9	Theoretical	Transcription in eukaryotes
10	Theoretical	Transcritpion control mechanisms
11	Theoretical	Protein synthesis
12	Theoretical	Mutation and mutagenesis
13	Theoretical	DNA repair
14	Theoretical	DNA repair malfunctions
	Final Exam	Final Exam

Workload Calculation				
Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	13	2	2	52
Midterm Examination	1	35	2	37
Final Examination	1	35	2	37
			Total Workload (Hours)	126
			[Total Workload (Hours) / 25*] = **ECTS**	5
**25 hour workload is accepted as 1 ECTS*				

Learning Outcomes	
1	1. Explain the basic learning areas
2	2. Learning basic cellular functions in molecular level

3	3. Learning molecular biology concepts
4	
5	

Programme Outcomes *(Medical Biology Master)*	
1	To acquire fundamental knowledge on medical biology field
2	To gain expertise on molecular biology techniques
3	To utilize molecular biology techniques
4	To be able to construct and conduct a research project
5	To be able to follow and interpret scientific advancements

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	2	2
P2	1	2	1	5	3
P3	1	2	1	5	4
P4	2	1	1	2	3
P5	3	3	4	3	5