AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title	Molecular Cell Biology I								
Course Code	TIB501		Couse Level	Second Cycle (Master's Degree)					
ECTS Credit	5	Workload	128 *(Hours)*	Theory	3	Practice	0	Laboratory	0
Objectives of the Course	Basic molecular cellular biology education								
Course Content	Cellular biology, eukaryotic cell types, structure and function of elements that make up the eukaryotic cell, physical and communicative links between cells, systemic effects on eukaryotic cells (hormones, growth factors), the minimum conditions needed by the cell.								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Discussion, Individual Study								
Name of Lecturer(s)	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	Introduction to cell biology and basic chemical concepts
2	Theoretical	Basic molecular genetic concepts
3	Theoretical	Basic molecular genetic techniques
4	Theoretical	Gene organisation and expression
5	Theoretical	Regulation of gene expression
6	Theoretical	Cell imaging, fractionation and culturing
7	Theoretical	Biological membranes
8	Intermediate Exam	Midterm exam
9	Theoretical	Cellular energetics
10	Theoretical	Protein trafficking
11	Theoretical	Cell signal transduction
12	Theoretical	Cell organisation and motility
13	Theoretical	Cell cycle
14	Theoretical	Cell death
15	Final Exam	Final Exam

Workload Calculation				
Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	13	1	3	52
Midterm Examination	1	24	2	26
Final Examination	1	48	2	50
			Total Workload (Hours)	128
			[Total Workload (Hours) / 25*] = **ECTS**	5
**25 hour workload is accepted as 1 ECTS*				

Learning Outcomes	
1	Explain the basic learning areas
2	Learning basic cellular functions in molecular level
3	Learning molecular biology concepts

4	Learning basic signal transduction pathways
5	Learning to analyze data of molecular biological techniques

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