



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Genetic Engineering							
Course Code		TIB524		Couse Level		Second Cycle (Master's Degree)			
ECTS Credit	6	Workload	151 (<i>Hours</i>)	Theory	2	Practice	2	Laboratory	0
Objectives of the Course									
Course Content									
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation)					
Name of Lecturer(s)									

Assessment Methods and Criteria

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

Recommended or Required Reading

1	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)
2	Molecular cloning: A laboratory manual – Michael Green and Joseph Sambrook – Cold Spring Harbor Laboratory Press (Fourth edition) 2012

Week	Weekly Detailed Course Contents	
1	Practice	Introduction to genetic engineering
2	Practice	DNA modification enzymes I
3	Practice	DNA modification enzymes II
4	Practice	Plasmid DNA
5	Practice	chromosomal DNA
6	Practice	Subcloning
7	Practice	Recombinant DNA
8	Intermediate Exam	Midterm exam
9	Practice	Promoters
10	Practice	DNA digestion
11	Practice	in vitro mutagenesis I
12	Practice	in vitro mutagenesis II
13	Practice	Subcloning project I
14	Practice	Subcloning project II
15	Final Exam	Final Exam

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	13	2	2	52
Lecture - Practice	13	5	2	91
Midterm Examination	1	2	2	4
Final Examination	1	2	2	4
Total Workload (Hours)				151
[Total Workload (Hours) / 25*] = ECTS				6

*25 hour workload is accepted as 1 ECTS

Learning Outcomes

1	
2	



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

