

COURSE DEFINITION FORM

Course Title: Biotechnology				Code :		Name of the Programme: Biology Education		
Education and Teaching Methods							Credits	
Lecture	Application	Laboratuary	Project/ Field Study	Hw.	Other	Total	Credit	ECTS
28			36		36	100	2	3
Semester		Autumn/Spring		Language		Turkish/English		
Course Type	Basic Scientific ☐		Scientific ☒		Technical Elective ☐		Social Elective ☐	
Course Contents	Biotechnology, molecular biotechnology, rekombinnat proteins, vaccines, plant biotechnology, transgenic animals							
Course Objectives	can explain the concept of Biotechnology Know the application area							
Learning Outcomes and Competences	Can you explain the concept of biotechnology. Knows the application area.							
Textbook and /or References								
ASSESSMENT CRITERIA								
Theoretical Courses			Project Course and Graduation Study					
	If any, mark as (X)	Percent (%)		If any, mark as (X)	Percent (%)			
Midterm Exams	x	40	Midterm Exams					
Quizzes			Midterm Controls					
Homeworks			Term Paper					
Term Paper (Projects,reports,)			Oral Examination					
Laboratory Work			Final Exam					
Final Exam	x	60	Other					
Other								
Week	Subjects							
1	What is biotechnology? Historical development of biotechnology.							
2	What is molecular biotechnology?							
3	Molecular biotechnology application areas and sub-branches. Rekombinnat proteins. How to recombinant proteins are produced. The creation of recombinant molecules.							
4	Be given to the living cells, and expression. The importance of the expression system used. Organism to produce recombinant proteins in prokaryotes.							
5	Production of recombinant proteins in host Eukaryot.							
6	Difficulties encountered in the use of host Eukaryot.							
7	What is tissue culture.							
8	Recombinant protein production and use examples of monoclonal antibodies.							
9	What are monoclonal antibodies?							
10	Application areas and application of monoclonal antibodies.							
11	Vaccines. Plant biotechnology.							
12	Transgenic animals.							
13								
14								
Instructors								
e-mail								
Website								