AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title			Biotechnology At Home						
Course Code			TBY319		Couse Level		First Cycle (Bachelor's Degree)		
ECTS Credit	3	Workload	50 *(Hours)*	Theory	2	Practice	0	Laboratory	0
Objectives of the Course			Demonstrate to students that the feasibility of certain biotechnological applications at a home conditions						
Course Content			Microorganisms in biotechnology, fermented foods, plant tissue cultures at a home conditions						
Work Placement			N/A						
Planned Learning Activities and Teaching Methods			Explanation (Presentation), Demonstration, Discussion						
Name of Lecturer(s)			Assoc. Prof. Yelda EMEK						

Assessment Methods and Criteria

Method	Quantity	Percentage (%)
Midterm Examination	1	40
Final Examination	2	70

Recommended or Required Reading

1	Lecture notes
2	Bitki Biyoteknolojisi, Rüştü Hatipoğlu, Adana, 2012

Week	Weekly Detailed Course Contents	
1	Theoretical	Introduction
2	Theoretical	Definition of biotechnology and applications
3	Theoretical	Microorganisms in biotechnological prosses
4	Theoretical	Microorganisms in biotechnological prosses
5	Theoretical	Production of various dairy products
6	Theoretical	Production of various fermented foods and drinks products
7	Theoretical	Several laboratory supplies and alternatives can be used at home
8	Intermediate Exam	Midterm exam
9	Theoretical	Sterilization and sterilization methods
10	Theoretical	Nutrient media used in plant tissue culture
11	Theoretical	Media preparation for tissue culture at home conditions
12	Theoretical	Tissue culture from sedds
13	Theoretical	Plant tissue cultures used in crop production
14	Theoretical	Plant tissue cultures used in crop production
15	Theoretical	Final exam

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	13	1	2	39
Midterm Examination	1	4	1	5
Final Examination	1	5	1	6
			Total Workload (Hours)	50
			[Total Workload (Hours) / 25*] = **ECTS**	2

25 hour workload is accepted as 1 ECTS

Learning Outcomes

1	Students learn beneficial microorganisms used food sector
2	Have information about plant tissue culture techniques
3	Apply clonal propagation from plant tissue culture techniques
4	will have an idea of the minimum conditions to make hobby tissue culture conditions at home

5	Students learn to make plant tissue culture in home conditions

Programme Outcomes *(Dairy Technology)*

1	Having sufficient infrastructure in basic sciences and engineering subjects and ability to use the theoretical and applied info instantly in this field.
2	Determining the modern techniques, tools and information technologies required for applications related with his field and ability to use them efficiently
3	Ability for planning, projecting, and designing, following up, analyzing and finding target-driven solutions related with his field
4	Ability to have professional ethic and awareness.
5	Ability to work, decide, express opinions orally and in written individually
6	Ability to participate team studies, taking responsibility, making leadership.
7	Ability to conceive Ataturk's principles and reforms, to communicate in Turkish and foreign language.
8	Ability to comprehend the necessity to learn for a life time, to monitor developments in science and technology and continuously renew himself.
9	Having sufficient level of information about production and quality control of milk and dairy products and also product development, increasing product quality and food security fields.
10	Ability to detect, define, solve problems related with his field and to select and apply suitable methods and modeling techniques for this purpose.
11	To be conscious about workplace applications, worker health, work security and environment subjects, to have knowledge about legal results of the engineering applications related with his subject.

Contribution of Learning Outcomes to Programme Outcomes *1:Very Low, 2:Low, 3:Medium, 4:High, 5:Very High*

	L1	L2	L3	L4	L5
P8	4	4	4	4	4
P9	4	4	4	4	4