



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Biotechnology and Gm Products							
Course Code		ÇS307		Course Level		Short Cycle (Associate's Degree)			
ECTS Credit	2	Workload	50 (Hours)	Theory	2	Practice	0	Laboratory	0
Objectives of the Course		Below topics have been targeted: 1. Nowadays, the use and importance of biotechnology; 2. Production of transgenic products/living things, and Features of the GM technology; 3. Importance of GM products in terms of environment and human.							
Course Content		Development of biotechnology/nanotechnology, and use of them in variety fields. The living things/products are produced by GM technology, producing countries, and possible effects of them on human health/environment. The studies are performed in this field in our country and world.							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Discussion, Case Study, Individual Study					
Name of Lecturer(s)		Lec. Sevil ÖZCAN							

Assessment Methods and Criteria

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

Recommended or Required Reading

1	Prof. Dr. Selim Çetiner, What is Genetically Modified Organism (GMO)? Questions and Answers-1, Sabancı University Faculty of Engineering and Natural Sciences Tuzla, İstanbul)
2	Prof. Dr. Kemal GÜVEN, Genetically Modified Organisms, Dicle university Molecular Biology Department Manager
3	Heredity and Evolution (2007) Ali Demirsoy, Meteksan

Week	Weekly Detailed Course Contents	
1	Theoretical	Basic concepts such as chromosome, gene, genome, etc.
2	Theoretical	What is the Mutation? Chromosomal mutations and reasons.
3	Theoretical	What are the Biotechnology and Nanotechnology? Their importance in our daily life.
4	Theoretical	Development of the Biotechnology, and its importance for genome Project.
5	Theoretical	GMO technology, and its applications.
6	Theoretical	Why are GMO products required?
7	Theoretical	Use of the GMO technology in agriculture.
8	Theoretical	Midterm
9	Theoretical	Use of the GMO technology in medicine.
10	Theoretical	Use of the GMO technology in food.
11	Theoretical	The benefits/The harms of the GMO products.
12	Theoretical	The products that are produced using of GMO technology, and the countries which are using this technology mostly.
13	Theoretical	Countries which have banned the producing of the GMO products, and reasons of them.
14	Theoretical	The status of GMO products in our country.
15	Theoretical	The biosafety protocol.

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	1	2	42
Midterm Examination	1	2	1	3



Final Examination	1	4	1	5
Total Workload (Hours)				50
[Total Workload (Hours) / 25*] = ECTS				2
*25 hour workload is accepted as 1 ECTS				

Learning Outcomes

1	Define the Biotechnology and GMO technology.
2	Know the products that produced by GM technology.
3	Know the potential impact of GM corps for human and environment.
4	Explain the effects of GMO products on human health.
5	Knows the use of GMO technology in the health field.

Programme Outcomes (First and Emergency Aid)

1	To be able to be aware of their professional authorities and responsibilities.
2	To be able to use the principles of individual and organizational communication skills.
3	To be able to define the emergency medical services and the pre-hospital emergency medical system devices used in Turkey and the world .
4	To be able to perform physical assessment of the patient and primary and secondary inspection.
5	To be able to apply the methods of handling and transportation of the patient
6	To be able to recognize the rules of the general approach to trauma patients and to be able to be capable of handling and maintenance of trauma equipment.
7	To be able to recognize emergency vehicles' mechanical and technical equipment and to be able to drive emergency vehicles.
8	To be able to identify the principles of pre-hospital emergency care in cases of environmental emergencies.
9	To be able to identify the principles of pre-hospital emergency care in medical emergencies.
10	To be able to analyze the ECG rhythm and apply the principles of pre-hospital emergency care for rhythm Disorders.
11	To be able to recognize and apply the pre-hospital emergency care drugs and fluids.
12	To be able to identify basic life support applications, Advanced Life Support applications and Advanced air way applications.
13	To be able to recognize the principles of pre-hospital emergency during disasters.
14	To be able to protect and maintain the highest level of physical and mental health.
15	To be able to recognize human anatomy and physiology.
16	To be able to develop good communication and human relations skills with colleagues and patients.
17	To be able to apply Infection Control Methods and check infectious situations of emergency vehicles and equipment, ensure the conditions of asepsis-antisepsis and pre-hospital emergency care with Infectious Diseases.
18	To have the appropriate knowledge of medical sciences at the level of interest, to use specific medical terms and terminology of field

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	2	2	2	2	2
P2	3	3	3	3	3
P3	4	4	4	4	4
P4	3	2	2	2	2
P5	3	3	3	3	3
P6	3	3	3	3	3
P7	5	5	5	5	5
P8	2	2	2	2	2
P9	1	1	1	1	1
P10	3	3	3	3	3
P11	1	1	1	1	1
P12	2	2	2	2	2
P13	1	1	1	1	1
P14	3	3	3	3	3
P15	4	4	4	4	4
P16	4	4	4	4	4
P17	3	3	3	3	3

