

AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Biotechnology	and Gm Proc	ducts						
Course Code		ÇS307		Couse 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 things/product human health/	of biotechnolc s are produce environment.	gy/nanc d by GN The stu	otechr /I tech dies a	nology, and inology, pr are perform	d use of them oducing count ned in this field	in variety field tries, and pos d in our count	ls. The living sible effects of th ry and world.	iem on
Work Placement		N/A								
Planned Learning Activities and Teachin		and Teaching I	Vethods	Explan	ation	(Presentat	ion), Discussi	on, Case Stud	dy, Individual Stu	dy
Name of Lecturer(s)		Lec. Sevil ÖZ	CAN							

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, Sabanci 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



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

Learning	Outcomes
Louining	outoomoo

	5	
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 (Medical Imaging Techniques)

1	To be able to get information the working principles of Radiology, Nuclear Medicine and Radiotherapy devices, and distinguish their components, use these devices in accordance with operating instructions.
2	To be able to perform the procedures in accordance with the examination of Radiology and Nuclear Medicine imaging .
3	To be able to apply the radiotherapy treatment, planned by radiation physicist with instruction of radiotherapist.
4	To be able to develop and perform the film printing of the images that obtained by imaging techniques of Radiology, Nuclear Medicine
5	To be able to evaluate the images that obtained by imaging techniques of Radiology, Nuclear Medicine in terms of radiographic quality and takes the necessary measures.
6	To be able to know the medical and radiologic terminology, and pronounce and use them correctly
7	To be able to take the necessary measures in accordance with the rules of Radiation safety and protection from radiation, and apply them.
8	To be able to distinguish the anatomical structures on images, obtained by the conventional and cross-sectional imaging techniques of Radiology, Nuclear medicine.
9	To be able to communicate well with patient, their family and the hospital staff.
10	To be able to move with own professional duties, powers and responsibilities of the consciousness and apply the rules of professional ethics.
11	To be able to adapt to a multi-disciplinary team work.
12	To be able to have a basic knowledge of human physiology.
13	To be able to distinguish anatomical structures.
14	To be able to establish a cause-and-effect relationship between events.
15	To be able to have the ability of analytical thinking and problem solving.
16	To be able to apply the basic principles of first aid.
17	It has basic knowledge about human anatomy
18	Understanding the basic concepts and principles of physics while providing, in the medical field and in particular medical imaging students better understand the issues involving technical vocational courses
19	OHS 'basic concepts; work accidents, occupational diseases, occupational physicians, occupational safety specialist, İSGB, OSGB, hazard classes, risk assessment, OHS employee representatives is
20	Have basic knowledge about basic medical practices and makes applications

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



P14	5	5	5	5	5
P15	5	5	5	5	5
P16	1	1	1	1	1
P17	4	4	4	4	5
P18	3	3	3	3	3
P19	4	4	4	4	4
P20	4	4	4	4	4

