FOOD PACKAGING TECHNOLOGY

1	Course Title:	FOOD PACKAGING TECHNOLOGY
2	Course Code:	VBH5023
3	Type of Course:	Optional
4	Level of Course:	Second Cycle
5	Year of Study:	1
6	Semester:	1
7	ECTS Credits Allocated:	4.00
8	Theoretical (hour/week):	1.00
9	Practice (hour/week):	0.00
10	Laboratory (hour/week):	0
11	Prerequisites:	None
12	Language:	Turkish
13	Mode of Delivery:	Face to face
14	Course Coordinator:	Prof. Dr. AYŞEGÜL EYİGÖR
15	Course Lecturers:	Yok
16	Contact information of the Course Coordinator:	Mail:aeyigor@gmail.com Tel:02242941334 Adres: Uludağ Ünv. Veteriner Fak. Besin Hijyeni ve Teknolojisi Anabilim Dalı
17	Website:	http://saglikbilimleri.uludag.edu.tr
18	Objective of the Course:	To teach definition, functions, types of packaging, packaging of animal-derived foods, MAP, active and smart packaging, prevention of migration between food and package material.
19	Contribution of the Course to Professional Development:	
20	Learning Outcomes:	
	1	Able to interpret expectations of producers and consumers related to package.
	2	Able to define food spoilage.
	3	List protection functions of package and relate this to food spoilage
	4	Define properties of glass packaging
	5	Define functions of paper and paperboard packaging
	6	Able to classify aluminum and can packaging
	7	Able to list plastic and plastic-based packages
	8	Determine packaging material to be used for animal-derived foods.
	9	Define basics for aseptic packaging and MAP
	10	Define active and smart packaging
21	Course Content:	

Course Content:

Week	Theoretical	Practice
1	Intoduction to couse and material, definiton of package, interpretations of expectations of producers and consumers related to package	

2	Food spoilage (enzymatic, chemical and physical spoilage)	
3	Reelationship between protection functions of packaging and food spoilage	
4	Glass packaging	
5	Paper and paperboard packaging	
6	Aluminum and can packaging	
7	Corrosion in metal packaging sülfür blackening, and rusting	
8	Plastic and plastic-based packages, important packages in food industry	
9	Packaging of red and white meats and their products	
10	Packaging of milk and dairy products	
11	Aseptic packaging in food sector	
12	MAP in food packaging	
13	Active and smart packaging	
14	Migration from package to food	

22	Textbooks, References and/or Other Materials:	1. Üçüncü, M. Gıda Ambalajlama Teknolojisi, Meta Basım Matbaacılık Hizmetleri, İzmir, 2007. 2. Ünlütürk, A., Turantaş, F. Gıda Mikrobiyolojisi. MengiTan Basımevi, İzmir, 1999. 3. Potter, N.N., Hotchkiss, J.H. Food Science. An aspen

Activites			Number	Duration (hour)	Total Work Load (hour)
TERM LEARNING ACTIVITIES	**NUMBER**	**WEIGHT**			
Theoretical			14	1.00	14.00
Practicals/Labs			0	0.00	0.00
Self-study and preperation	0	0.00	14	7.00	98.00
Homeworks			0	0.00	0.00
Project			0	0.00	0.00
Final Exam	1	100	1	0.00	0.00
Field Studies			0	0.00	0.00
Contribution of Term (Year) Learning Activities to Success Grade		0.00	0	0.00	0.00
Others			0	0.00	0.00
Contribution of Final Exam to Success Grade		100.00	1	2.00	2.00
Total Work Load					114.00
Measurement and Evaluation Techniques Used in the Course					3.80
ECTS Credit of the Course					4.00

24	**ECTS / WORK LOAD TABLE**

25	**CONTRIBUTION OF LEARNING OUTCOMES TO PROGRAMME QUALIFICATIONS**															
	PQ1	**PQ2**	**PQ3**	**PQ4**	**PQ5**	**PQ6**	**PQ7**	**PQ8**	**PQ9**	**PQ10**	**PQ11**	**PQ12**	**PQ13**	**PQ14**	**PQ15**	**PQ16**
ÖK1	5	4	3	0	0	1	1	5	3	0	0	0	0	0	0	0
ÖK2	3	3	0	0	1	0	0	5	5	3	0	0	0	0	0	0
ÖK3	2	2	1	1	0	1	1	5	4	0	0	0	0	0	0	0
ÖK4	1	0	0	0	0	0	1	5	4	3	0	0	0	0	0	0

ÖK5	1	0	0	0	0	0	1	5	4	3	0	0	0	0	0	0
ÖK6	1	0	0	0	0	0	1	5	4	3	0	0	0	0	0	0
ÖK7	1	0	0	0	0	0	1	5	4	3	0	0	0	0	0	0
ÖK8	5	5	3	2	0	0	0	5	3	5	0	0	0	0	0	0
ÖK9	5	5	3	2	0	0	0	5	3	5	0	0	0	0	0	0
ÖK10	5	5	3	2	0	0	0	5	3	5	0	0	0	0	0	0

LO: Learning Objectives PQ: Program Qualifications

Contribution Level:	**1 very low**	**2 low**	**3 Medium**	**4 High**	**5 Very High**