	PLANT HY	GIENI	E AND SANITATION					
1	Course Title:	PLANT H	TYGIENE AND SANITATION					
2	Course Code:	GMD322	25TR					
3	Type of Course:	Compuls	sory					
4	Level of Course:	First Cyc	le					
5	Year of Study:	3						
6	Semester:	5						
7	ECTS Credits Allocated:	3.00						
8	Theoretical (hour/week):	2.00						
9	Practice (hour/week):	0.00						
10	Laboratory (hour/week):	0						
11	Prerequisites:	Non						
12	Language:	Turkish						
13	Mode of Delivery:	Face to f	ace					
14	Course Coordinator:	Doç.Dr.	TÜLAY ÖZCAN					
15	Course Lecturers:	Yrd. Doç	. Dr. Arzu AKPINAR-BAYİZİT					
16	Contact information of the Course Coordinator:	Uludağ Üniversitesi Ziraat Fakültesi Gıda Mühendisliği Bölümü 16059 Görükle/Bursa Tel: 0 224 2941498 Fax: 0 224 2941402 e-posta: : tulayozcan@uludag.edu.tr						
17	Website:							
18	Objective of the Course:	The main purpose of this course is informing the students about consumption, preparation, production, packaging, storage, transportation, distribution and sale phases of food from production to consumption, additionally general rules of hygiene and sanitation and providing necessary precautions about food safety in food industry.						
19	Contribution of the Course to Professional Development:							
20	Learning Outcomes:							
		1	Informing about importance of hygiene and sanitation in a relation with sanitation and microorganisms sanitation hygiene control in food industry					
		2	Informing abut control and general hygiene of food businesses to ensure hygiene					
		3	Informing about sanitation practices for food processing areas, cleaning compounds, sanitizer and waste management					
		4	Informing about quality control and assurance system in food industry					
		5						
		6						
		7						
		8						
		9						

		10			
21	Course Content:				
		Co	urse Content:		
Week	Theoretical		Practice		
1	Definition and Importance of Hygiene Sanitation	and			
2	Contamination Sources of Foods				
3	Pathogen Microorganisms in Food Processing Area				
4	Importance of Microorganisms in Food Processing Area	d			
5	Microbiological Sampling and Control Methods for Food Processing Area				
6	Personnel and Workplace Hygiene				
7	Class Discussion and Midterm Exam				
8	Importance of Water in Food Processi and Cleaning of Water	ing Area			
9	Physical, Chemical and Microbiologica	al			
Activit	tes		Number	Duration (hour)	Total Work Load (hour)
Theore	Clearing Systems Applied and Deterg	ents in	14	2.00	28.00
Practic	als/Labs		0	0.00	0.00
Self stu	dy and preperation Disinfectants used for Food Processin	ng Area	14	1.00	14.00
Homew	vorks		0	0.00	0.00
Pr <b>bje</b> ct	Desinsectisation in Food Processing A	Area	0	0.00	0.00
Field S	tudies		0	0.00	0.00
Midterr	Qtalff) <sup>S</sup> Control Systems for Hygiene a	and	1	20.00	20.00
Others			0	0.00	0.00
Final E	xams		1	25.00	25.00
Total V	Vork Load				107.00
Total w	ork load/ 30 hr				2.90
ECTS	Credit of the Course				3.00

Food Plant Sanitation: design, maintenance, and good manufacturing practices (M.M. Cramer, CRC Press, 2006, 283 pp) Food Industry Quality Control Systems (M. Clute, , CRC Press, 2009, 510 pp	22	Textbooks, References and/or Other Materials:	YÜCEL. A. and T. ÖZCAN, 2010. Plant Hygiene. Uludag University, Faculty of Agriculture, Lecturer Note: 36, 123 p. Gıda Hijyeni ve Sanitasyonu (Prof. Dr. Semra Kayaardı, Sidas Medya Ltd. Şti., 3. Baskı, 2008, 278 s) Gıda ve Personel Hijyeni (Prof. Dr. Sıdıka Bulduk, Detay Yayncılık, 2003, 212 s) Hijyen – Sanitasyon: Endüstriyel ve Evsel Uygulamaları (Prof. Dr. R. Şeminur Topal, 2008, 333 s) Temel Gıda Hijyeni – Gıda Hijyeni 1 (Prof. Dr. Deniz Göktan & Prof. Dr. Günnur Tunçel Sidas Medya Ltd. Şti., 2010, 214 s) Gıda İşletmelerinde Hijyen -Gıda Hijyeni 2 (Prof. Dr. Deniz Göktan &Prof. Dr. Günnur Tunçel, Sidas Medya Ltd. Şti., 2010, 381s) Food Hygiene and Sanitation in Food Industry (S. Roday, McGraw-Hill, 1999, 315 pp) Principles of Food Sanitation (N.G. Marriott & R.B. Gravani, Birkhäuser, 2006, 413 pp) Food Plant Sanitation: design, maintenance, and good manufacturing practices (M.M. Cramer, CRC Press, 2006, 283 pp) Food Industry Quality Control Systems (M. Clute, , CRC Press, 2009, 510 pp
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23	Assesment
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TERM LEARNING ACTIVITIES	NUMBE R	WEIGHT					
Midterm Exam	1	40.00					
Quiz	0	0.00					
Home work-project	0	0.00					
Final Exam	1	50.00					
Total	2	100.00					
Contribution of Term (Year) Learning Activitie Success Grade	es to	40.00					
Contribution of Final Exam to Success Grade	9	60.00					
Total		100.00					
Measurement and Evaluation Techniques Us Course	sed in the						

## 24 ECTS / WORK LOAD TABLE

25	CONTRIBUTION OF LEARNING OUTCOMES TO PROGRAMME QUALIFICATIONS															
	PQ1	PQ2	PQ3	PQ4	PQ5	PQ6	PQ7	PQ8	PQ9	PQ1 0	PQ11	PQ12	PQ1 3	PQ14	PQ15	PQ16
ÖK1	5	5	5	4	5	5	4	5	5	5	5	0	0	0	0	0
ÖK2	5	5	5	4	5	5	4	5	5	5	4	0	0	0	0	0
ÖK3	4	4	4	5	5	5	4	5	4	5	5	0	0	0	0	0
ÖK4	5	4	4	5	5	5	4	5	4	5	5	0	0	0	0	0
LO: Learning Objectives PQ: Program Qualifications																
Contrib 1 very lo ution Level:		low	2 low			3 Medium		4 High		5 Very High						