

# FOOD AROMA AND AROMA CHEMISTRY

1	Course Title:	FOOD AROMA AND AROMA CHEMISTRY	
2	Course Code:	GMB5030	
3	Type of Course:	Optional	
4	Level of Course:	Second Cycle	
5	Year of Study:	1	
6	Semester:	2	
7	ECTS Credits Allocated:	6.00	
8	Theoretical (hour/week):	2.00	
9	Practice (hour/week):	0.00	
10	Laboratory (hour/week):	2	
11	Prerequisites:	None	
12	Language:	Turkish	
13	Mode of Delivery:	Face to face	
14	Course Coordinator:	Doç.Dr. OZAN GÜRBÜZ	
15	Course Lecturers:	Prof. Dr. Duygu GÖÇMEN	
16	Contact information of the Course Coordinator:	Uludağ Üniversitesi Ziraat Fakültesi Gıda Mühendisliği Bölümü 16059 Görükle/Bursa Tel: 0224 2941500 Fax: 0224 2941402 e-posta: ozang@uludag.edu.tr	
17	Website:		
18	Objective of the Course:	Informing about: <ul style="list-style-type: none"> <li>• food aroma substances, formation of aroma compounds and chemical structures</li> <li>• food flavours and interactions with other food constituents</li> <li>• aroma analysis</li> <li>• understand natural and synthetic flavorings,</li> <li>• relationship between structure and odor, relationships between odor and flavour attributes and the volatile,</li> <li>• flavour chemistry</li> </ul>	
19	Contribution of the Course to Professional Development:		
20	Learning Outcomes:		
		1	The students will be able to interpret the aroma formation
		2	The students will be able to learn aroma analysis
		3	The students will be able to explain flavour chemistry and flavour formation
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21	Course Content:		
		<b>Course Content:</b>	
Week	Theoretical	Practice	

1	Taste perception - Aroma description			
2	Taste perception - Aroma description			
3	Odor perception - Aroma description			
4	Odor perception - Odor Perception by upper nasal and back of nose			
5	Taste compounds - Odor Perception by upper nasal and back of nose			
6	Taste compounds - Tongue mapping			
7	Odor compounds - Flavour extraction techniques			
8	Odor compounds - Flavour extraction techniques			
9	Taste theory - Liquid-liquid extraction			
10	Odor theory - Liquid-liquid extraction			
11	Aroma compounds present in food - Solid phase micro extraction			
12	Aroma compounds present in food - Solid phase micro extraction			
13	Formation mechanism of aroma compounds in food - Instrumental calculation techniques			
14	Formation mechanism of aroma compounds in food -Gas chromatography and mass spectroscopy			
Activites		Number	Duration (hour)	Total Work Load (hour)
Theoretical		14	120.00	168.00
Practicals/Labs		0	0.00	0.00
Self study and preperation		28	27.00	28.00
Homeworks		1	80.00	80.00
Projects		0	0.00	0.00
Field Studies		0	0.00	0.00
TERM LEARNING ACTIVITIES		NUMBER	WEIGHT	
Midterm exams		0	0.00	0.00
Others		0	0.00	0.00
Final Exams		1	85.00	85.00
Quiz		0	0.00	
Total Work Load				235.00
Total work load/ 30 hr		1	50.00	7.83
Final Exam				
ECTS Credit of the Course				6.00
Contribution of Term (Year) Learning Activities to Success Grade		50.00		
Contribution of Final Exam to Success Grade		50.00		
Total		100.00		
Measurement and Evaluation Techniques Used in the Course				
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	2	5	4	4	3	2	5	5	2	3	0	0	0	0	0	0
ÖK2	4	2	5	5	3	3	4	1	3	3	0	0	0	0	0	0
ÖK3	3	5	3	5	3	4	4	2	3	5	0	0	0	0	0	0
ÖK4	5	3	3	2	5	3	2	4	4	2	0	0	0	0	0	0
ÖK5	5	4	2	4	5	4	5	4	2	2	0	0	0	0	0	0
ÖK6	4	5	5	3	4	3	3	5	4	4	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				