AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title	Carbonhydrate Chemistry								
Course Code	GMP501		Couse Level	Second Cycle (Master's Degree)					
ECTS Credit	8	Workload	200 *(Hours)*	Theory	3	Practice	0	Laboratory	0
Objectives of the Course	This course aims to inform the student about the structure, properties and the functions of the carbohydrates.								
Course Content	The course is intended to provide detailed information on the physical and chemical properties and structure of the carbohydrate. This course includes classification of Carbohydrate and detail examination of carbohydrates. This course involves the detection of changes in carbohydrate structure that occur during processing of food.								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Discussion, Case Study, Individual Study								
Name of Lecturer(s)									

Assessment Methods and Criteria		
Method	Quantity	Percentage (%)
Midterm Examination	1	40
Final Examination	1	60

Recommended or Required Reading	
1	Saldamlı İ., Gıda Kimyası, 1998, Ankara
2	Fennema, O., Food Chemistry, 1996
3	Horton, D., Advances in Carbonhydrate Chemistry and Biochemistry,1970

Week	Weekly Detailed Course Contents	
1	Theoretical	Monosaccharides
2	Theoretical	Oligosaccharides
3	Theoretical	Polysaccharides
4	Theoretical	Physical properties of carbonhydrates
5	Theoretical	Chemical properties of carbonhydrates
6	Theoretical	Carbonhydrate reactions
7	Intermediate Exam	Exam
8	Theoretical	The attitudes of polysaccharides in liquid, dispersion and gels
9	Theoretical	Starch, cellulose and hemicelluloses
10	Theoretical	Gums
11	Theoretical	Sweeteners
12	Theoretical	Nutrient fibre
13	Theoretical	The effect of food operations on carbonhydrates
14	Final Exam	Final Exam

Workload Calculation				
Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	9	3	168
Midterm Examination	1	15	1	16
Final Examination	1	15	1	16
			Total Workload (Hours)	200
			[Total Workload (Hours) / 25*] = **ECTS**	8
**25 hour workload is accepted as 1 ECTS*				

Learning Outcomes	
1	
2	
3	
4	
5	
6	

Programme Outcomes *(Food Engineering Master)*	
1	To provide further training and research opportunities to food engineers to meet the needs of the food industry
2	To develop and deepen the current and advanced knowledge in the field of food engineering with original thought and / or research at the level of expertise, based on the qualifications of the master
3	To identify, define, formulate and solve problems in applications related to Food Engineering and gain the ability to select and apply appropriate analytical methods and modeling techniques
4	To gain the ability to evaluate the accuracy of the data obtained from food analysis
5	To educate students having research, entrepreneur qualifications

Contribution of Learning Outcomes to Programme Outcomes *1:Very Low, 2:Low, 3:Medium, 4:High, 5:Very High*

	L1	L2	L3	L4	L5	L6
P1	5	4	4	5	5	4
P2	3	3	3	5	5	3
P3	1					
P4				4	4	4
P5	1					