AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title	Cereal Analysis								
Course Code	GKA207		Couse Level	Short Cycle (Associate's Degree)					
ECTS Credit	4	Workload	100 *(Hours)*	Theory	2	Practice	1	Laboratory	0
Objectives of the Course	Aims to obtain detailed theoretical and practical knowledge about the grain and product analyzes.								
Course Content	The importance of cereals in nutrition, commercially important cereals, morphology and composition of wheat, discretion of wheat quality and standardization, wheat milling and production of wheat flour, packaging and storage of flour, production of bread, production of macaroni, biscuits, cracker and cake production technologies, starch production, breakfast cereals								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Experiment, Demonstration								
Name of Lecturer(s)	Lec. Ali GÖNCÜ								

Assessment Methods and Criteria		
Method	Quantity	Percentage (%)
Midterm Examination	1	40
Final Examination	1	70

Recommended or Required Reading	
1	Tahıl ve Ürünlerinde Analitik Kalite Kontrolü ve Laboratuvar Uygulama Kılavuzu. A. Elgün, M. Certel, Z. Ertugay, H.G. Kotancılar. Atatürk Üni. Yayın No.867.

Week	Weekly Detailed Course Contents	
1	Theoretical	Sampling and Sample Preparation from Grains
	Practice	Sampling and Sample Preparation from Grains
2	Theoretical	Determining the amount of wheat Foreign Matter and hectoliter Weight Determination
	Practice	Determining the amount of wheat Foreign Matter and hectoliter Weight Determination
3	Theoretical	Thousand Grain Weight in Wheat and Determination Particle Size Determination
	Practice	Thousand Grain Weight in Wheat and Determination Particle Size Determination
4	Theoretical	Grain Hardness Testing in Wheat
	Practice	Grain Hardness Testing in Wheat
5	Theoretical	Wheat Yield and Moisture Determination
	Practice	Wheat Yield and Moisture Determination
6	Theoretical	Protein Detection in Wheat
	Practice	Protein Detection in Wheat
7	Theoretical	Determination of Ash and Wheat Starch
	Practice	Determination of Ash and Wheat Starch
8	Intermediate Exam	Midterm Exam
9	Theoretical	Analysis of Falling Number in Wheat
	Practice	Analysis of Falling Number in Wheat
10	Theoretical	Sedimentation Value Determination in Wheat
	Practice	Sedimentation Value Determination in Wheat
11	Theoretical	Determination of Gluten and Wheat Gluten Index Value
	Practice	Determination of Gluten and Wheat Gluten Index Value
12	Theoretical	Sensory Analysis of Wheat
	Practice	Sensory Analysis of Wheat
13	Theoretical	Chemical Analysis of Wheat Flour

13	Practice	Chemical Analysis of Wheat Flour
14	Theoretical	Physico-chemical analysis in wheat Flour
	Practice	Physico-chemical analysis in wheat Flour
15	Theoretical	Physico-chemical analysis in wheat Flour
	Practice	Physico-chemical analysis in wheat Flour
16	Final Exam	Final Exam

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	1	2	42
Laboratory	14	1	1	28
Individual Work	2	1	1	4
Midterm Examination	1	10	1	11
Final Examination	1	14	1	15
			Total Workload (Hours)	100
			[Total Workload (Hours) / 25*] = **ECTS**	4

**25 hour workload is accepted as 1 ECTS*

Learning Outcomes

1	
2	
3	
4	
5	

Programme Outcomes *(Food Quality Control and Analysis)*

1	Having basic knowledge about food products
2	Having knowledge for Production and hygiene in food products, preservation, microbiology, quality control and analysis
3	Having skills and discipline for working in the laboratory and using laboratory materials,
4	Developing positive attitudes about learning and knowledge and lifelong learning in the field.
5	Using the information and communication technologies at the level required by the work areas
6	Act in accordance with scientific, cultural and ethical values
7	Having sufficient consciousness about environmental protection, occupational health and safety issues.

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	5	5	5	5	5
P2	5	5	5	5	5
P3	5	5	5	5	5
P4	3	3	3	3	3
P5	4	4	4	4	4
P6	4	4	4	4	4
P7	1	1	1	1	1