



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Food Technology Machinery							
Course Code		ZTM614		Course Level		Third Cycle (Doctorate Degree)			
ECTS Credit	7	Workload	176 (<i>Hours</i>)	Theory	3	Practice	0	Laboratory	0
Objectives of the Course		technical physics and the laws of thermodynamics. extraction, precipitation, centrifugal separation, filtration, fermentation, pasteurization process, sterilizing process, steam treatment, distillation, drying, crushing-crushing-grinding, separating types of cleaning, mixed-cleaning-disinfection principles, practices and inform students about equipment.							
Course Content		Technical physics, the laws of thermodynamics, extraction precipitation process, centrifugal separation, filtering and filters, and the stages of the fermentation process, the pasteurization process and machines, and equipment sterilization process, hıharlı processing, distillation and steam boilers, drying, crushing-crushing-grinding processes and machines, types of separation, cleaning, and hybrid machines, disinfection principles							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Demonstration, Discussion, Individual Study, Problem Solving					
Name of Lecturer(s)									

Assessment Methods and Criteria

Method	Quantity	Percentage (%)
Midterm Examination	1	40
Final Examination	1	60

Recommended or Required Reading

1	Süt İşleme Mühendisliği. Oysun, G., Gönç, S., 1996. EÜ Ziraat Fak.Yay., No:522, İzmir
2	Meyve ve Sebze İşleme Teknolojisi 2 cilt.,Acar, J., 2006. Uğur Yayınclık, İstanbul

Week	Weekly Detailed Course Contents	
1	Theoretical	course disposition, introduction
2	Theoretical	Technical physics, the laws of thermodynamics
3	Theoretical	Technical physics, the laws of thermodynamics
4	Theoretical	Extraction process of precipitation
5	Theoretical	Centrifugal separation process
6	Theoretical	Filtering and Filters
7	Theoretical	And stages of the fermentation process
8	Intermediate Exam	Midterm exam
9	Theoretical	The pasteurization process and equipment
10	Theoretical	The sterilization process and equipment
11	Theoretical	Steam processing, distillation and steam boilers
12	Theoretical	Drying, crushing-crushing-grinding processes and machines
13	Theoretical	Varieties separation, cleaning, and mixed-cleaning machines
14	Theoretical	Varieties separation, cleaning, and mixed-cleaning machines
15	Theoretical	Dezenfeksiyon prensipleri, uygulamaları
16	Final Exam	Final exam

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	2	2	56
Lecture - Practice	14	0	2	28
Assignment	14	0	2	28
Term Project	1	0	40	40
Midterm Examination	1	10	2	12



Final Examination	1	10	2	12
Total Workload (Hours)				176
[Total Workload (Hours) / 25*] = ECTS				7
*25 hour workload is accepted as 1 ECTS				

Learning Outcomes

1	Learning concepts related to food technology
2	A knowledge of the systems used in food technology
3	Food processing, analyzing and editing procedures
4	Food processing technologies and systems used in the calculation of machine learning and applications
5	Food processing technologies and systems used in the calculation of machine learning and applications

Programme Outcomes (Agricultural Machinery Doctorate)

1	Identification, formulation and solving the problems in the field of Agricultural Machinery
2	The ability to use modern engineering tools and techniques
3	The ability to use the information, which is obtained by following the scientific and technological developments, in the academic life and practice.
4	The ability to evaluate multi-faced relationship between them by understanding interaction among agricultural technology, soil, plants and animals
5	Professionalism and ethical responsibility
6	The ability to work in disciplinary and multi-disciplinary teams
7	The ability to communicate effectively
8	The ability to do research for accessing information and to use data base and other resources
9	The ability to do analyze and interpret the experimental results and the design of experiment
10	The ability to identify and interpret knowledge of current professional issues and events
11	The ability to get aware the universal and social effects of engineering solutions and applications
12	Accordance with the requirements of science and technology, ability to use scientific knowledge creative

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

	L1	L2	L3	L4
P1	5	5	5	5
P2	5	5	5	5
P3	5	5	5	5
P4	5	5	5	5
P5	4	4	4	4
P6	4	4	4	4
P8	5	5	5	5
P9	5	5	5	5
P10	5	5	5	5
P11	5	5	5	5
P12	5	5	5	5

