



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Principal Drying Of Agricultural Products							
Course Code		ZTM604		Course Level		Third Cycle (Doctorate Degree)			
ECTS Credit	7	Workload	173 (<i>Hours</i>)	Theory	3	Practice	0	Laboratory	0
Objectives of the Course		The aim of the course is to inform students about the history of the drying process of the product, the phenomenon of equilibrium moisture content and drying, drying environment and the air requirement, drying theory, principles of drying grain products, dryers and drying methods, farm dryers, solar energy by utilizing the principles of drying and drying of fruits and vegetables.							
Course Content		In this course, the basic relationships between agricultural products and moisture, moist air properties, the product air flow relations, the basic theoretical knowledge drying, dryers and drying methods, drying of grain products, vegetables and dried fruits, herbs drying issues are addressed.							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), 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	Tarım ürünleri kurutma tekniği. 1999. Yağcıoğlu, A. EÜZF Yayınları No.:536. Bornova
2	Drying: Principles, applications and design. 1986. Strumillo, C., Kudra, T. Gordon and Breach Science Pub
3	Tarım ürünlerini kurutma tekniğine giriş. 1998. Öztekin, S., Soysal, Y. Ç.Ü.Z.F. Adana

Week	Weekly Detailed Course Contents	
3	Theoretical	Of humid air
4	Theoretical	Product and air flow relations
5	Theoretical	Basic theoretical knowledge about drying
6	Theoretical	Basic theoretical knowledge about drying
7	Theoretical	Dryers and drying methods
8	Intermediate Exam	Midterm exam
9	Theoretical	Dryers and drying methods
10	Theoretical	Dryer design parameters
11	Theoretical	Drying of granular products
12	Theoretical	Drying of vegetables
13	Theoretical	Drying of fruits
14	Theoretical	Drying weed
15	Theoretical	Dryer selection
16	Final Exam	Final exam

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	3	3	84
Assignment	14	0	3	42
Term Project	1	0	25	25
Midterm Examination	1	8	2	10
Final Examination	1	10	2	12
Total Workload (Hours)				173
[Total Workload (Hours) / 25*] = ECTS				7
*25 hour workload is accepted as 1 ECTS				



Learning Outcomes

1	Understanding air to moisture relations
2	Learning the basics of drying
3	understand dryers and drying systems
4	Apply the methods of drying for agricultural products
5	Apply the methods of drying for agricultural products

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	4	5	5	5
P3		5	5	5
P4	4	5	5	5
P8	3	3	4	5
P9	4	5	5	5
P10	5	5	5	5
P11	5	5	5	5
P12	5	5	5	5

