



## AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Design of Conveying Systems Used in Agriculture							
Course Code		ZTM620		Course Level		Third Cycle (Doctorate Degree)			
ECTS Credit	7	Workload	172 ( <i>Hours</i> )	Theory	3	Practice	0	Laboratory	0
Objectives of the Course		The aim of this course is to provide conveying characteristics of agricultural materials, conveying machine selection criterion, design principles of conveying machines							
Course Content		The importance of conveying processes and machines in agriculture, conveying machine design parameters, classification of conveying machines, selection criteria of the conveyors, agricultural material-organs of conveyor relation, agricultural material-organs of conveyor relation, design principles of conveyors							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Case Study, Project Based Study, 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	Taşıma ve İletim Tekniği. Deligönül,F., 1989. Ç.Ü.Ziraat Fakültesi Ders Kitabı No:3 Adana
2	Taşıma İletim Tekniği. Tunalıgil.B.G., Eker.B., 1985 Ankara Üniversitesi Ziraat Fakültesi Yayınları 962. Ankara

Week	Weekly Detailed Course Contents	
1	Theoretical	The importance of conveying processes and machines in agriculture
2	Theoretical	Conveying machine design parameters
3	Theoretical	Classification of conveying machines
4	Theoretical	Selection criteria of the conveyors
5	Theoretical	Agricultural material-organs of conveyor relation
6	Theoretical	Organ types and specifications of conveyors
7	Theoretical	Constructional properties of conveyors
8	Intermediate Exam	Term exam
9	Theoretical	Capacity of conveyors
10	Theoretical	Power requirements of conveyors
11	Theoretical	Design principles of steady flow conveyors
12	Theoretical	Design principles of steady flow conveyors
13	Theoretical	Design principles of discrete flow conveyors
14	Theoretical	Design principles of discrete flow conveyors
15	Theoretical	Design principles of discrete flow conveyors
16	Final Exam	Final exam

### Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	3	3	84
Assignment	14	0	2	28
Reading	14	0	2	28
Midterm Examination	1	12	1	13



Final Examination	1	18	1	19
Total Workload (Hours)				172
[Total Workload (Hours) / 25*] = <b>ECTS</b>				7
*25 hour workload is accepted as 1 ECTS				

### Learning Outcomes

1	Understanding the importance of conveying machines in agriculture
2	Understanding the design principles of conveying machines
3	Understanding agricultural material-organs of conveyor relation
4	Understanding of capacity and power requirement issues of conveyors
5	Understanding the design principles of steady flow conveyors
6	Understanding the design principles of discrete flow conveyors
7	Understanding the test methods of conveyors

### 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	L5	L6	L7
P1	5	5	5	5	5	5	5
P2	5	5	5	5	5	5	5
P3	5	5	5	5	5	5	5
P4	5	5	5	5	5	5	5
P5	1	1	1	1	1	1	1
P6	1	1	1	1	1	1	1
P8	2	2	2	2	2	2	2
P9	2	2	2	2	2	2	2
P10	2	2	2	2	2	2	2
P11	4	4	4	4	4	4	4
P12	3	3	3	3	3	3	3

