



## AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Design of Agricultural Building Constructions							
Course Code		ZTY507		Couse Level		Second Cycle (Master's Degree)			
ECTS Credit	7	Workload	175 ( <i>Hours</i> )	Theory	3	Practice	0	Laboratory	0
Objectives of the Course		The aim of this course is to inform about identification of agriculturalstructural elements dimensioning of structural elements, structural loads, and the discovery of quantities, tender and vesting arrangements							
Course Content		Wood, steel, reinforced concrete, analysis and dimensioning of structural elements, isostatic and hyperstatic systems, snow, wind, soil etc. examination of the loads, building cost calculations.							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Discussion, 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	Özcan, K. 1992. Yapı. Duygu Büro, Ankara
2	Y.Odabaşı. 2000. Ahşap ve Çelik Yapı Elemanları. Beta Basım Yayım. İstanbul.
3	Lindley, J.A., J.H. Whitaker. 1996. Agricultural Buildings and Structures. ASAE Michigan. ABD.
4	Walker, J. N., F. E. Woeste. 1992. Post-Frame Building Design. ASAE Michigan. ABD.
5	Barnes M., C. Mander. 1991. Farm Building Construction. Farming Press Limited. Ipswich. UK.
6	Ambrose, J. 1992. Construction Details. The American Institute of Architects. John Wiley & Sons, Inc.

Week	Weekly Detailed Course Contents	
1	Theoretical	Introduction to agricultural structure elements
2	Theoretical	Wood structural elements and connections
3	Theoretical	Connection tools
4	Theoretical	Axial load bearing elements
5	Theoretical	Elements effected by bending
6	Theoretical	Roof systems and it's project
7	Theoretical	Example roof system project
8	Theoretical	Steel structural elements
9	Intermediate Exam	MID-TERM EXAM
10	Theoretical	Joint calculations in steel structures
11	Theoretical	Tensile bars
12	Theoretical	Pressure bars
13	Theoretical	Beams, trusses
14	Theoretical	Support beams and combinations
15	Theoretical	Steel roof systems and roof elements calculations
16	Final Exam	FINAL EXAM

### Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	8	3	154
Midterm Examination	1	7	2	9



Final Examination	1	10	2	12
Total Workload (Hours)				175
[Total Workload (Hours) / 25*] = ECTS				7
*25 hour workload is accepted as 1 ECTS				

### Learning Outcomes

1	Evaluate in detail the scientific point of view the basic information at the undergraduate level
2	To evaluate the loads acting on the structure based on standards
3	To solve the problems on sizing of structural elements
4	To inspect Turkish and foreign language sources on the course
5	To relate gained experience in different areas to the course
6	To interpret scientific articles on the course
7	To produce solutions to problems about course subjects
8	To use computer software about study area
9	To follow the current building technologies
10	To use information which come from this course on any agricultural building project

### Programme Outcomes (Agricultural Structures and Irrigation Master)

1	Ability to use, evaluate and improve the knowledge gained from field of study at an expert level
2	Ability to reach necessary the knowledge
3	To able to conduct scientific studies (research) related to the field
4	Ability to consider academical and ethical values the studies
5	Ability to improve editing method and evaluate the results of researches
6	The studies, the ability to reach result and application, develop new approaches
7	A topic in the field of written, verbally and visually as the ability to express
8	Effective use of Turkish language and ability to communicate in a foreign language both written and verbal

### 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	L8	L9	L10
P1	5	5	5	5	5	4	4	4	4	4
P2	4	5	5	4	5	4	5	5	4	5
P3	4	4	5	4	4	5	5	4	4	5
P4	4	5	5	4	3	5	5	4	4	5
P5	5	4	5	5	4	4	4	4	5	4
P6	5	5	4	5	5	5	5	5	5	5
P7	5	4	5	5	5	4	4	5	5	5
P8	5	5	5	5	5	5	5	5	5	5

