AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title	Agricultural Irrigation								
Course Code	ORT203		Couse Level		Short Cycle (Associate's Degree)				
ECTS Credit	4	Workload	100 *(Hours)*	Theory	2	Practice	0	Laboratory	0
Objectives of the Course	To be able to recognize the importance of irrigation in agricultural production, needed for the design of surface and pressurized irrigation systems is to give information to students about the basic issues								
Course Content	Irrigation definition, importance and history of the land and water resources potential in Turkey, the land irrigability status, sources of supply, irrigation water, and soil-water-plant relationships, inflitrasyon, crop water consumption, irrigation systems, planning principles, planning of open channels, irrigation schedule and irrigation systems, water distribution patterns, the nature and classification of irrigation water, irrigation methods, and drainage.								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Discussion, Individual Study								
Name of Lecturer(s)	Ins. Talih GÜRBÜZ								

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

Recommended or Required Reading	
1	Güngör, Y., Erözel, A.Z., Yıldırım, O., 1996. Sulama. Anakara Üniv. Ziraat Fakültesi Tarımsal Yapılar ve Sulama Bölümü, Yayın No: 1443, Ders Kitabı: 424, Ankara, s: 295.
2	Israelsen, O. W., Hansen, W.E., 1962. Irrigation Princeples and Practices. Utah State University, Logan, Utah.
3	James, L.G., 1988. Principles of Farm Irrigation System Design. John Wiley & Sons, Inc., New York, USA.

Week	Weekly Detailed Course Contents	
1	Theoretical	The definition and importance of irrigation, the benefits of irrigation, irrigation in Turkey and world, irrigation method, irrigation system
2	Theoretical	Methods of operation of irrigation systems
3	Theoretical	Soil-plant-water relationships
4	Theoretical	The need for irrigation water, plant water consumption, crop coefficient, irrigation efficiency, effective rainfall
5	Theoretical	The amount of irrigation water applied to irrigation, irrigation interval, system capacity, irrigation scheduling
6	Theoretical	Irrigation methods, suitable irrigation method is chosen, flooding irrigation method, irrigation method ponding, long pans irrigation, furrow irrigation method
7	Theoretical	Sprinkler irrigation method
8	Intermediate Exam	Midterm exam
9	Theoretical	Drip irrigation method
10	Theoretical	Mini sprinkler irrigation method, irrigation method leak
11	Theoretical	Irrigation water quality
12	Theoretical	The importance of , drainage in irrigation definition and benefits of drainage
13	Theoretical	Drainage problems in the areas of agriculture, drainage studies
14	Theoretical	Methods of drainage, surface drainage, underground drainage
15	Final Exam	Final exam

Workload Calculation				
Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	1	2	42
Assignment	2	1	2	6
Land Work	4	2	2	16
Individual Work	4	1	1	8

Quiz	3	1	1	6
Midterm Examination	1	8	1	9
Final Examination	1	12	1	13
			Total Workload (Hours)	100
			[Total Workload (Hours) / 25*] = **ECTS**	4
**25 hour workload is accepted as 1 ECTS*				

Learning Outcomes	
1	To be able to comprehend the importance of irrigation in agriculture,
2	To be able to explain the relationship between soil, plant and water in terms of irrigation,
3	To be able to explain the differences between the irrigation methods and systems,
4	To be able to determine the plant water consumption and irrigation time,
5	To be able to determine the most appropriate method of irrigation,
6	To be able to recognize the elements of irrigation system,
7	To be able to explain the key issues to carry out the design of surface and pressurized irrigation systems,
8	To be able to evaluate the overall relationship between irrigation and drainage.

Programme Outcomes *(Organic Agriculture)*	
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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
P8	4	4	4	4	4	4	4	4
P9	3	3	3					
P11	3							