

AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Plant Nutrition in Dry Farming							
Course Code		ZTO612		Couse Level		Third Cycle (Doctorate Degree)			
ECTS Credit	8	Workload	195 <i>(Hours)</i>	Theory	2	Practice	2	Laboratory	0
Objectives of the Course		The objective cultivation and	of this course I use of organ	is to give ic materia	e basic informa al in dry farmin	tions on water g and their effe	use, fallow, c ects on nutrier	rop rotation, soil ht uptake and yie	ld
Course Content		Effect of water and yield will b also some rela	r use, fallow, c be evaluated. ating research	crop rotati Then, bas samples	ion, soil cultiva sic principles o in the country	ation and use c of nitrogen, pho y level will be g	f organic mate osphorous, zin jiven.	erial on nutrient u c and boron stuc	uptake dies, and
Work Placeme	ent	N/A							
Planned Learning Activities		and Teaching	Methods	Explanat Study, P	tion (Presenta Problem Solvin	tion), Experime g	ent, Discussio	n, Case Study, Ir	ndividual
Name of Lecturer(s)									

Assessment Methods and Criteria

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

Recommended or Required Reading

1	Soil Management and Organic Farming. 2006. S.C. Panda , Agrobios (India), 462 p
2	Assessing On-Farm Water-Use Efficiency: A New Approach. 2005. K. Shideed, T. Oweis, M. Gabr, M. Osman. ICARDA, 86 p.
3	Dry-Farming, 2004. John A Widtsoe, Kessinger Publishing, 180 p.
Λ	Agrotechnology for Dryland Farming 2002 Anvind M. Dhonte, Jodhnur, Scientific, 651 p.

4	Agrotechnology for Dryland Farming	g, 2002. Arvin	d M. Dhopte.	Jodhpur, Sci	ientific, 651 p.	

Week	Weekly Detailed Course Contents			
1	Theoretical	Water use efficiency		
	Preparation Work	Literature research		
2	Theoretical	Water use efficiency - nitrogen relations		
	Preparation Work	Determination of homework		
3	Theoretical	Water use efficiency – phosphorous relations		
	Preparation Work	Presentation and discussion		
4	Theoretical	Fallow- nitrogen relations		
	Preparation Work	Presentation and discussion		
5	Theoretical	Residual nitrogen in legumes- cereal crop rotation		
	Preparation Work	Presentation and discussion		
6	Theoretical	Nitrogen use in dry farming		
	Preparation Work	Presentation and discussion		
7	Theoretical	Nitrogen loses in dry farming		
	Preparation Work	Presentation and discussion		
8	Intermediate Exam	Midterm Exam		
9	Theoretical	Nitrogen use efficiency in dry farming		
	Preparation Work	Presentation and discussion		
10	Theoretical	Determination of phosphorous fertilizer needs in dry farming		
	Preparation Work	Presentation and discussion		
11	Theoretical	Zinc fertilization in dry farming		
	Preparation Work	Presentation and discussion		
12	Theoretical	Boron toxicity in dry farming		
	Preparation Work	Presentation and discussion		
13	Theoretical	Use of organic fertilizers in dry farming		
	Preparation Work	Presentation and discussion		
14	Theoretical	Decomposition of organic matarials in dry farming		



14	Preparation Work	Presentation and discussion
15	Theoretical	Soil cultivation-nutrient relations in dry farming
	Preparation Work	Seasonal project
16	Final Exam	Final exam

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload		
Lecture - Theory	14	0	2	28		
Lecture - Practice	14	0	2	28		
Seminar	2	0	15	30		
Laboratory	8	1	2	24		
Midterm Examination	1	0	35	35		
Final Examination	1	0	50	50		
	195					
[Total Workload (Hours) / 25*] = ECTS				8		

*25 hour workload is accepted as 1 ECTS

Learning Outcomes

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1	Being able to learn the basic principles of plant nutrition in dry farming
2	Being able to learn the water use efficiency
3	Being able to learn the nitrogen use efficiency in dry farming
4	Being able to learn the soil cultivation-nutrient relations in dry farming
5	Being able to learn the using of organic fertilizers in dry farming

Programme Outcomes (Soil Doctorate)

1	To be able to apply the theoretical information achieved during the graduate study
2	To be able to collect data by scientific means, to evaluate and interpret
3	To be able to update himself continuously
4	To be able to assess the convenient analytical methods during the process of the scientific study
5	To be able to put forth solutions to soil use and plant development

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

	L1	L2	L3	L4	L5
P1	4	4	4	4	4
P2	5	2	2	2	4
P3	5	2	2	2	4
P4	5	2	2	2	4
P5	4	2	2	2	4

