



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Plant Nutrition And Fertilization							
Course Code		FY210		Couse Level		Short Cycle (Associate's Degree)			
ECTS Credit	2	Workload	50 (Hours)	Theory	2	Practice	0	Laboratory	0
Objectives of the Course		Recognition of thenecessarynutrientsforplantsandhavingknowledgeabout plantnutritionandfertilization, andtogaintheabilitytousefertilizers							
Course Content		Introduction, an importantplantnutrient, nutrientandwateruptake in plants, theeffects of nutrients on plantgrowth, classificationanduse of fertilizers							
Work Placement		Students must have to complete their internship within the required time and properties. The required rules are describes at the Adnan Menderes University, Sultanhisar Vocational School, Student Internship Instructions.							
Planned Learning Activities and Teaching Methods				Explanation (Presentation)					
Name of Lecturer(s)		Lec. Şebnem Nalan AKAROĞLU							

Assessment Methods and Criteria

Method	Quantity	Percentage (%)
Midterm Examination	1	40
Final Examination	1	70

Recommended or Required Reading

1	Course notes of Lecturers
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Week	Weekly Detailed Course Contents	
1	Theoretical	Introduction, plant nutrition elements needed
	Preparation Work	Lecture material
2	Theoretical	Uptaken utrien telements in plants
	Preparation Work	Lecture material
3	Theoretical	Uptake water in plants
	Preparation Work	Lecture material
4	Theoretical	Nitrogen, theeffects of nitrogen on plantgrowth, nitrogendeficiencyandexcess
	Preparation Work	Lecture material
5	Theoretical	Phosphorus, theeffects of phosphorus on plantgrowth, phosphorusdeficiencyandexcess
	Preparation Work	Lecture material
6	Theoretical	Potassium effects on plant growt hand development of potash, potassium deficiency and excess
	Preparation Work	Lecture material
7	Theoretical	Calcium, the metabolic functions of calcium, calcium deficiency and excess
	Preparation Work	Lecture material
8	Preparation Work	Lecture material
	Intermediate Exam	Midterm
9	Theoretical	Magnesium, metabolicfunctions, magnesium, magnesiumdeficiencyandexcess, sulfur, sulfurmetabolicfunctions, deficiencyandexcess of sulfur
	Preparation Work	Lecture material
10	Theoretical	Iron, ironmetabolicfunctions, irondeficiencyandexcess, zinc, zincmetabolicfunctions, deficiencyandexcess of zinc, boron, boronmetabolicfunctions, deficiencyandexcess of boron
	Preparation Work	Lecture material
11	Theoretical	Fertilizerproductionandconsumption, classification of fertilizers
12	Theoretical	Organicfertilizer
	Preparation Work	Lecture material
13	Theoretical	Chemicalfertilizers (nitrogenousfertilizers, phosphorusfertilizers, potassiumfertilizers)
	Preparation Work	Lecture material
14	Theoretical	Chemicalfertilizers (calciumfertilizers, magnesiumfertilizers, sulfurfertilizers)
	Preparation Work	Lecture material



15	Theoretical	Fertilizers including micronutrients,
	Preparation Work	Lecture material
16	Preparation Work	Lecture material
	Final Exam	Final Exam

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	2	28
Midterm Examination	1	9	1	10
Final Examination	1	11	1	12
Total Workload (Hours)				50
[Total Workload (Hours) / 25*] = ECTS				2
*25 hour workload is accepted as 1 ECTS				

Learning Outcomes

1	Knows important nutrient elements for plants
2	Knows how plants take nutrients and water
3	Knows effects of nutrient elements on plant development
4	Classifies fertilizers
5	Applies fertilizer

Programme Outcomes (Medical and Aromatic Plants)

1	Having the recognition, classification and the use areas knowledge of medical and aromatic plants
2	Having practical and technical knowledge about cultivation and production of medical and aromatic plants
3	Having knowledge of morphology, anatomy, cytology, physiology and biochemical structures of medical and aromatic plants
4	Having knowledge of importance of soil conditions to grow medical and aromatic plants
5	Having information and the ability to use materials related with basic math and basic chemistry founded on qualifications gained in secondary education
6	Having ability to use effective own language and having knowledge of foreign language in order to communicate own colleagues and own customers
7	Having ability to collect medical and aromatic plants, having knowledge of seed technology, drying and conservation of these plants
8	Having ability to identify and to fight diseases and pests of medical and aromatic plants
9	Having knowledge of all Agricultural activities
10	Having knowledge of Atatürk Principle and Revolutions and to assimilate Atatürk Principle and Revolutions
11	Having consciousness of quality
12	Having knowledge and accumulation of investigative and evaluation
13	Ability to work as an individual capable of independent decision-making ideas verbally and in writing, stating the figure to communicate in a clear and concise
14	Ability to identify plants used for medical purposes and to obtain mixtures from drugs acquired these plants
15	Having skill and knowledge of marketing techniques medical and aromatic plants

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

	L1	L2	L3	L4	L5
P4	3	3	3	3	3

