



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Soil Science							
Course Code		ZYD109		Course Level		Short Cycle (Associate's Degree)			
ECTS Credit	3	Workload	78 (Hours)	Theory	2	Practice	1	Laboratory	0
Objectives of the Course		This course aims to students in crop production, natural plant growth media to recognize the soil physical, chemical, sağlamakta be able to understand the informed view about the biological properties of soil fertility							
Course Content		The general structure of the soil, soil physical, chemical and biological properties of soil formation, soil-water interactions, erosion and soil conservation							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Demonstration, Discussion, Case Study, Individual Study					
Name of Lecturer(s)									

Assessment Methods and Criteria

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

Recommended or Required Reading

1	Altınbaş, Ü., Çengel, M., Uysal, H., Okur, B., Okur, N., Kurucu, Y., Delibacak, S., 2004. Toprak Bilimi. E.Ü. Zir. Fak. Yayın No: 557, İzmir.
2	Ergene, A., 1993. Toprak biliminin esasları. Atatürk Üni. Yayın No:586, Erzurum.

Week	Weekly Detailed Course Contents	
1	Theoretical	Erozyon kavramının farkına varabilme ve yapılabilecekleri belirleyebilme
	Practice	To identify concepts and be able to realize the erosion they can
2	Theoretical	Identification of the land, the introduction of a general nature.
	Practice	As informed in the field of observational soil
3	Theoretical	Soil parent material and material types.
	Practice	Visual presentation of the soil forming rocks
4	Theoretical	Examination of soil formation and effective factors.
	Practice	Visual presentation of the soil forming rocks
5	Theoretical	Soil formation and productivity relations.
	Practice	Field observations
6	Theoretical	Analysis of the morphology and soil horizons.
	Practice	soil morphology and visual horizons with slide
7	Theoretical	To evaluate the physical properties of the soil: Soil texture disclosure of relationships and productivity.
8	Intermediate Exam	Midterm exam
9	Theoretical	The physical properties of the soil: a description of soil structure and fertility relationships, information about soil color and soil temperature.
	Practice	Soil texture, visual slides on the structure
10	Theoretical	Soil and water: the water retention in soil, water types and efficiency in terms of evaluation.
	Practice	earth attitude in the field of observational
11	Theoretical	Analysis of the chemical properties of soils: Colloidal fraction and cation exchange, assessing them in terms of soil fertility.
	Practice	Soil pH-pH meter
12	Theoretical	Chemical properties of soil: Soil reaction, importance, pH - productivity relationships.
	Practice	chemical properties of soil: Soil reaction, importance, pH - productivity relationships.
13	Theoretical	Soil organic matter, properties, evaluation of the efficiency of organic matter sources.
	Practice	slide on Erosion



14	Theoretical	biological properties of the soil: from the viewpoint definition and soil fertility of soil organisms
	Practice	biological properties of the soil: from the viewpoint definition and soil fertility of soil organisms
15	Theoretical	biological properties of the soil: from the viewpoint definition and soil fertility of soil organisms
	Practice	biological properties of the soil: from the viewpoint definition and soil fertility of soil organisms
16	Final Exam	Final exam

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	1	2	42
Lecture - Practice	14	1	1	28
Midterm Examination	1	3	1	4
Final Examination	1	3	1	4
Total Workload (Hours)				78
[Total Workload (Hours) / 25*] = ECTS				3

*25 hour workload is accepted as 1 ECTS

Learning Outcomes

1	Knows the importance of soil properties in crop production
2	Ensures sustainability by increasing soil fertility
3	Taking into account the soil-plant relationships does increase planning efficiency
4	Fights Erosion
5	Know the chemical and biological properties of soils

Programme Outcomes (Organic Agriculture)

1	To have university life, to use computer technology and to have skills for raising of scientific data
2	To produce according to organic agriculture rules
3	To know and apply starter to organic agriculture, and to get product certification
4	To know genetic for organic vegetable and animal species
5	To know and apply organic production principle and regulations and protection of environment
6	Understand and apply production techniques for organic vegetable and animal
7	To understand control methods for diseases and pests in organic agriculture
8	Having knowledge of quality control, preserving and marketing of organic products
9	To having knowledge equipments and methods for new agricultural technologies
10	To have knowledge of professional ethics and responsibility
11	Ability to work in team and individual
12	To communicate orally and in writing
13	To have adopt life-long learning importance and to have follow professional developments

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

	L1	L2	L3	L4	L5
P3	2	1			
P4	3	2	2		3
P5	2	2	3	3	
P6	3	2			3
P8					3
P9				3	
P13		2			

