



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 (Olive Cultivation and Olive Processing Technology)

1	To be able to identify olive, soil and water and to having knowledge these
2	To be able to comprehend knowledge botany and fruit growing
3	To be able to comprehend table olive technology and to apply
4	To be able to comprehend knowledge basic biochemistry and olive oil chemistry and to have olive oil with modern and traditional systems, to have knowledge olive oil refinery, basic process and to have apply olive oil extraction
5	To be able to preserve olive and olive products in appropriate condition
6	To be able to comprehend growing olive plant with necessary agricultural methods and to have general maintenance of olive tree
7	To be able to evaluate olive by-products
8	To be able to comprehend knowledge about vegetable genetic
9	To be able to comprehend knowledge occupational safety and have apply first aid
10	To be able to apply necessary laboratory analysis in olive and olive products production
11	To be able to apply hygiene and sanitation rules in factory
12	To be able to comprehend knowledge of professional ethics and responsibility
13	To be able to comprehend knowledge marketing of olive products and to have olive management
14	To be able to communicate verbally and literally
15	To be able to comprehend planning olive growing and production area
16	To be able to comprehend knowledge vegetable ecology and protection of environment

