AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title	Soil and Water Conservation								
Course Code	TBB306		Couse Level	First Cycle (Bachelor's Degree)					
ECTS Credit	4	Workload	100 *(Hours)*	Theory	2	Practice	2	Laboratory	0
Objectives of the Course	Informing students about the relationships between soil and water to make them understand about the importance of the protection of water resources from a point of agricultural view.								
Course Content	Soil protection and environment, factors affecting erosion, soil and water conservation approaches, soil management, physical methods, erosion mechanics, fragmentation, transport and deposition processes, splash erosion, surface erosion, rill erosion, gully erosion, wind erosion, erosion hazard evaluation, erosion prediction models, water erosion control, wind erosion control and terrace designs.								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Discussion, Problem Solving								
Name of Lecturer(s)									

Assessment Methods and Criteria		
Method	Quantity	Percentage (%)
Midterm Examination	1	40
Final Examination	1	60

Recommended or Required Reading	
1	Taysun, A., 1989. Toprak ve Su Korunumu. E. Ü. Zir. Fak. Yay. No: 92-III.
2	Çanga, M. R., 1996. Toprak ve Su Koruma. A. Ü. Zir. Fak. Yayınları No:1386 Ders Kitabı No:400, Ankara.

Week	Weekly Detailed Course Contents	
1	Theoretical	Soil conservation and land use characteristics of soils in Turkey; Turkey`s general condition of the land existence.
	Practice	Laboratory presentation.
2	Theoretical	Land capability classification, the capability classifications according to Turkey`s land existence.
	Practice	Laboratory work and evaluation.
3	Theoretical	The potential water resources of Turkey.
	Practice	Laboratory work and evaluation.
4	Theoretical	Soil erosion; water erosion, the factors which affect the water erosion.
	Practice	Laboratory work and evaluation.
5	Theoretical	The types of water erosion.
	Practice	Laboratory work and evaluation.
6	Theoretical	How to calculate the surface runoff.
	Practice	Laboratory work and evaluation.
7	Theoretical	The determination of soil loss caused by water erosion.
	Practice	Laboratory work and evaluation.
8	Intermediate Exam	Midterm exam.
9	Theoretical	Precautions against water erosion; cultural precautions.
	Practice	Laboratory work and evaluation.
10	Theoretical	Mechanical precautions against water erosion.
	Practice	Laboratory work and evaluation.
11	Theoretical	Terracing; planning terrace systems.
	Practice	Laboratory work and evaluation.
12	Theoretical	Planning terrace systems.
	Practice	Laboratory work and evaluation.
13	Theoretical	Wind erosion; factors which affect wind erosion, wind erosion phases.
	Practice	Laboratory work and evaluation.
14	Theoretical	Wind erosion, wind erosion classification in connection with the violence degree.
	Practice	Laboratory work and evaluation.

15	Theoretical	How to control the wind erosion.
	Practice	Practice exam.
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
Midterm Examination	1	0	20	20
Final Examination	1	0	24	24
			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 design soil and water conservation structures.
2	To be able to identify the problems of agricultural lands.
3	To be able to determine precautions to be taken against water erosion.
4	To be able to determine the problems of soil and water resources related to sustainable usage.
5	To be able to explain engineering implementations in order to take precautions against the soil and water resources.