



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Substream Improvement in Basins							
Course Code		ZTY600		Course Level		Third Cycle (Doctorate Degree)			
ECTS Credit	6	Workload	150 (<i>Hours</i>)	Theory	3	Practice	0	Laboratory	0
Objectives of the Course		Course Objectives The aim of this course is to present soil and water conservation methods for improvement of the tributary in basins, to offer the principles of planning and Designing for improvement of the structures, In this context a selected sample will be prepared for the improvement structure project.							
Course Content		Rainfall and catchment characteristics, Runoff relationships with climatic factors, material handling movement of water and erosion The effects of the flow characteristics of the basin Flood flows and effects Tributary breeding methods applied Tributary for improvement of building types, styles, and other building structures applied to longitudinal and transverse Tributary conservation breeding structures, basins, cultural, and other measures.							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Discussion, Project Based Study, Individual Study, 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	Balcı, A.N., Öztan, Y., 1987. Flood Control (Sel Kontrolü). Karadeniz Üniversitesi, Genel Yayın No: 113, Trabzon.
2	Erkek, C., Ağırlioğlu, N., 1998. Water Resources Engineering (Su Kaynakları Mühendisliği). Beta Basım Yayım Dağıtım A.Ş., Yayın No: 387, İstanbul.
3	Troeh, F.R., Hobbs, J.A., Donahue, R.L., 1999. Soil and Water Conservation. Prentice-Hall, Inc., New Jersey.
4	Schwab, G.O., Fangmeier, D.D., Elliot, W.J., 1996. Soil and Water Management Systems. John Willey and Sons, Inc., New York.

Week	Weekly Detailed Course Contents	
1	Theoretical	Introduction and dating
2	Theoretical	Rainfall and catchment characteristics
3	Theoretical	Runoff relationships with climate factors
4	Theoretical	The movement of water
5	Theoretical	Erosion materials handling
6	Theoretical	The effects of the flow characteristics of the basin
7	Theoretical	Flood flows
8	Theoretical	The effects of flood
9	Intermediate Exam	MID-TERM EXAM
10	Theoretical	Methods for improvement of tributary
11	Theoretical	Tributary structural shapes for improvement
12	Theoretical	Applied in the transverse and longitudinal modes of the structure
13	Theoretical	Other production and drainage constructions.
14	Theoretical	Tributary protection treatment structures
15	Theoretical	Watersheds, cultural and other measures.
16	Final Exam	FİNAL EXAM



Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	6	3	126
Midterm Examination	1	8	2	10
Final Examination	1	12	2	14
Total Workload (Hours)				150
[Total Workload (Hours) / 25*] = ECTS				6
*25 hour workload is accepted as 1 ECTS				

Learning Outcomes

1	To know and apply the general principles of rehabilitation work at the basin level.
2	To produce solutions to the problems
3	To reach expected economic goals under existing conditions
4	To involve in a case study
5	To evaluate existing projects

Programme Outcomes (Agricultural Structures and Irrigation Doctorate)

1	Ability to analyze, synthesize and evaluate different forms of scientific knowledge in the field of studies
2	Approach to information systematically, and gain skills related to their field the research methods
3	Innovative science to develop a scientific method or a method that is known to practice in their field
4	Ability to organize and manage the project and advanced scientific research
5	Advanced technologies, find solutions to engineering problems taking advantage of the software and model approaches
6	Creative, unbiased and critical thinking
7	A topic in the field of written, verbally and visually as the ability to express
8	Ability to publish in refereed journals National and international the results of studies

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	5	5	5	4	4
P2	5	4	5	4	4
P3	4	4	4	3	2
P4	5	5	5	4	2
P5	5	4	5	5	3
P6	4	5	5	3	3
P7	5	5	5	4	2
P8	4	4	5	4	2

