

COURSE IDENTIFICATION FORM

Course Code and Name: IM5021 Planning and Design of Dams

Department of : CIVIL ENGINEERING /
DEPARTMENT OF CIVIL ENGINEERING /
DEPARTMENT OF CIVIL ENGINEERING THESIS
MASTER'S DEGREE PROGRAM

Semester	Theoretic Hour	Practice Hour	Total Hour	Credits	ECTS	Education Language	Type: Compulsory Elective
Fall	3	0	3	3	5	Turkish	Optional
Prerequisite (s)		-					
Instructor		Asst. Prof. Dr. Yusuf DOGAN				Mail : ydogan@munzur.edu.tr Web :	
Course Assistant						Mail : Web :	
Groups / Classes							
Course Aim		To give information on planning and design processes of various kinds of dams					
Course Goals		Introduction to dam engineering, Preparation of dam projects: Preliminary works, planning works, final project works, application and detail works, Concrete gravity dams, Embankment dams, Rockfill dams, Buttress dams, Arch dams, Design criteria, Surplusing works in dams: Spillways, sliding sluices, derivation tunnels.					
Course Learning Outs and Proficiencies		Upon successful completion of the course, the students will be able to : PO - 1 : describe various aspects of dam planning and design. PO - 2 : prepare dam projects. PO - 3 : plan and design of various kinds of dams. PO - 4 : plan and design of various special parts of dams.					
Course Basic and Auxiliary Contexts		Mehmet Berkün, Su Yapıları, 2007, Birsen Yayınevi Baraj Planlama ve Tasarımı Ders Notları Herzog, M.A.M., Practical Dam Analysis, Thomas Telford Ltd., 1999. Prof. Dr. M. Emin EMİROĞLU - Barajlar ders notları Prof. Dr. Necati AĞIRALIOĞLU, Baraj Planlama ve Tasarımı I, II ve III.					
Methods of Give a Lecture		Face to face					

Assessment Criteria		If Available, to Sign (x)	General Average Percentage (%) Rate
	1. Quiz	X	50
	2. Quiz		
	3. Quiz		
	4. Quiz		
	5. Quiz		
	Oral Examination		
	Practice Examination (Laboratory, Project etc.)		
	Final Exam	X	50
Semester Course Plan			
Week	Subjects		
1	Introduction		
2	Preparation of dam projects and Planning		
3	Environmental impacts of dams		
4	Dam flood hydrology		
5	Sediment movement in dams		
6	Dam reservoirs		
7	Dam geology and foundations		
8	Mid-term exam		
9	Fill dams		
10	Concrete dams		
11	Arch dams		
12	Roller compacted concrete dams		
13	Spillways and energy breakers		
14	Water intake structures and bottom weirs, stream diversion structures		