



HASAN KALYONCU UNIVERSITY
Faculty of Engineering
Course Description Form

COURSE: Water Resources Engineering				
CODE: CE471	SEMESTER: FALL			
LANGUAGE: ENGLISH	TYPE: COMPULSORY			
PRE-REQUISITES: - CO-REQUISITES: -	THEORY	PRACTICAL	CREDIT	ECTS
WEEKLY HOURS: 3	3	0	3	5

CONTENT OF THE COURSE:

Methodology for water resources development, management and conservation is introduced from the engineering viewpoint. Main topics are distribution of water resource on the earth, grasp and prediction of water demand, planning and design of water resources systems, estimation and prediction of river flow, policy and water rights, and operation of reservoirs.

OBJECTIVE OF THE COURSE:

The goal is to understand the basic theory and methodology for water demand prediction, water resources systems design, river flow estimation, water resources policy and reservoir operation.

WEEKLY SCHEDULE AND PRE-STUDY PAGES

Week	Topics
1	Course Description
2	Introduction to Water Resources Engineering
3	Reservoirs I
4	Reservoirs II
5	Dams I
6	Dams II
7	Dams III
8	Mid term Exam
9	Spillways I
10	Spillways II
11	Sediment Transportation
12	Diversion Weirs I
13	Diversion Weirs II
14	General Evaluation

TEXTBOOK:

- A.Melih Yanmaz (2013) Applied Water Resources Engineering 4th Edition
Publisher: Metu Press

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11
LO1	2	2	0	0	0	0	0	0	0	0	0
LO2	2	2	0	0	0	0	0	0	0	0	0
LO3	2	2	0	0	0	0	0	0	0	0	0
LO4	2	2	0	0	0	0	0	0	0	0	0
PO: Program Outcomes LO: Learning Outcomes Values: 0: None 1: Low 2: Medium 3: High											

INSTRUCTOR(S):	Asst.Prof.Dr. H.Çağan Kılınc
FORM PREPARATION DATE:	22.05.2019

LEARNING OUTCOMES OF THE COURSE:
<p>LO1: Students gain necessary knowledge on water resources projects.</p> <p>LO2: Students diagnose and solve the problems on water resources.</p> <p>LO3: Students learn data collection methods and analyzing methods.</p> <p>LO4: Students design water structures.</p>

CONTRIBUTION OF THE COURSE TO VOCATIONAL EDUCATION
The student learns to design dams based on land conditions, depending on the theoretical knowledge and sample applications he has learned from this course, also gains the vision of distinction between resources and needs, reservoir capacity, dam types, dam design principles and reservoir capacity.