

CE 471 WATER RESOURCES ENGINEERING

FALL 2025-2026

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Reference books:

-Applied Water Resources Engineering by Melih Yanmaz

-Engineering Hydrology by Nurünnisa Usul

Grading Policy

Quizzes (4)	10%
Presentation	15%
Exams (2)	40%
Final Exam	35%

Course Outline

Week	Topic
1	Introduction
2	Hydrologic Processes –Precipitation, Streamflow, Infiltration
3	Hydrograph Analysis; Reservoir Routing
4	Dams - Classification and parts of dams
5	Dams - Reservoir capacity determination
6	Dams - Construction principles
7	Midterm I
8	Spillways
9	Energy dissipators and Intakes
10	Water Supply - Municipal water requirements and population estimation
11	Water Supply - Hydraulics and Design of gravity transmission lines
12	Midterm II
13	Irrigation and Drainage -Introduction, land classification
14	Irrigation and Drainage - Design of irrigation systems