

Course	Name	WATER RESOURCES				
	Code	INS –401E		Type	Mandatory	
	Credit	2		Hours/ Week	2	
	CRN	Time	Lecturer	E-Mail	Teaching asst.	E-Mail
	11376	Monday 9:30-11:30	Abdüsselam Altunkaynak	altunkay@itu.edu.tr		
Course Book	Turkish	Erkek, C. ve Ağırlioğlu, N., Su Kaynakları Mühendisliği, Beta Yay., 1998 (3.Baskı)				
	English	Yanmaz, A. M., 1997, Applied Water Resources Engineering, METU PRESS, First Edition				
Recommended Books	1. Mays, L.W. Water Resources Engineering, Wiley, 2010. (2 nd edition) 2. Linsley, R.K., Franzini, J.B., Freyberg, D.L., Tchobanoglous, G., Water Resources Engineering, Mc Graw Hill, 1992 (4.Baskı) 3. Erkek, C. ve Ağırlioğlu, N., Su Kaynakları Problemleri, İ.T.Ü. Yay., 1995 (2.Baskı)					

In term activities	Numbers	Contribution to in term (%)
Midterms	2	40
Homework	1	10
Final	1	50
Requirement for Final Exam: Students are required to maintain a minimum attendance rate of 70% for classes.		

Weeks	Date	TOPIC	EXERCISES	Turkish Course Book (pages)	English Course Book (pages)
1	29.Sep.2025	Introduction to Water Resources	Water requirements	13-46	1-3
2	06.Oct.2025	Reservoirs	Active storage	212-248	7-15
3	13.Oct.2025	Reservoirs	Dead storage	212-248	15-24
4	20.Oct.2025	Dams	Acting forces	164-210	29-56
5	27.Oct.2025	Dams	Acting forces	164-210	29-56
6	03.Nov.2025	Spillways, Gates	Stability analysis	164-210	56-105
7	10.Nov.2025	Spillways, Gates	Stability analysis	164-210	121-145
8	17.Nov.2025	1 st Midterm			
9	24.Nov.2025	Spillways, Gates	Stability analysis	164-210	121-145
10	01.Dec.2025	Sediment transport	Spillways, Gates	49-73	109-119
11	08.Dec.2025	Sediment transport	Transportation Calculations	313-324	295-306
12	15.Dec.2025	Diversion Weirs	Design of diversion Weirs	325-333	311-326
13	22.Dec.2025	2 nd Midterm			
14	29.Dec.2025	Hydropower	Design of hydroelectric plants	333-345	327-340