

Course	Name	WATER RESOURCES				
	Code	INS –401E		Type	Mandatory	
	Credit	2		Hours/ Week	2	
	CRN	Time	Lecturer	E-Mail	Teaching asst.	E-Mail
	14590	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 class attendance rate of 70%.	
	The minimum total score required for in-term activities is 30.	

Weeks	Date	TOPIC	EXERCISES	Turkish Course Book (pages)	English Course Book (pages)
1	28.Sep.2026	Introduction to Water Resources	Water requirements	13-46	1-3
2	05.Oct.2026	Reservoirs	Active storage	212-248	7-15
3	12.Oct.2026	Reservoirs	Dead storage	212-248	15-24
4	19.Oct.2026	Dams	Acting forces	164-210	29-56
5	26.Oct.2026	Dams	Acting forces	164-210	29-56
6	02.Nov.2026	Spillways, Gates	Stability analysis	164-210	56-105
7	09.Nov.2026	Spillways, Gates	Stability analysis	164-210	121-145
8	16.Nov.2026	1 st Midterm			
9	23.Nov.2026	Spillways, Gates	Stability analysis	164-210	121-145
10	30.Nov.2026	Sediment transport	Spillways, Gates	49-73	109-119
11	07.Dec.2026	Sediment transport	Transportation Calculations	313-324	295-306
12	14.Dec.2026	Diversion Weirs	Design of diversion Weirs	325-333	311-326
13	21.Dec.2026	2 nd Midterm			
14	28.Dec.2026	Hydropower	Design of hydroelectric plants	333-345	327-340