

ITU – Civil Engineering Faculty – Civil Engineering Department
Course Description Form, 2012-2013Fall Term

Course	<i>Name</i>	WATER RESOURCES						
	<i>Code</i>	INS –441E			<i>Type</i>		Mandatory	
	<i>Credit</i>	2.5			<i>Hours/ Week</i>		2 / 1	
	CRN	Class	Time	Faculty	Office	Tel.	E-Mail	Office hours
	11984	A-303	Mon:09.30-11.30	Associate Professor Abdüsselam Altunkaynak	Hid. Lab.	285 6846	altunkay@itu.edu.tr	Monday 12:30-13:30
	11985	A-304	Wed:13.30-15.30	Associate Professor Mehmet Özger	Hid. Lab.	285 3717	ozgerme@itu.edu.tr	Wednesday 12:30-13:30
	11986	B-206	Mon:13.30-15.30	Associate Professor Abdüsselam Altunkaynak	Hid. Lab.	285 6846	altunkay@itu.edu.tr	Monday 12:30-13:30
	CRN	Class	Time	Teaching asst.	Office	Tel.	E-Mail	Office hours
	11984	A-303	Mon:11.30-12.30	İsmail Dabanlı	Hid. Lab.	285 3734	dabanli@itu.edu.tr	Monday
	11985	A-304	Wed:15.30-16.30	Yavuz Karsavran	Hid. Lab.	285 6847	karsavran@itu.edu.tr	Wednesday
11986	B-206	Mon:15.30-16.30	İsmail Dabanlı	Hid. Lab.	285 3734	dabanli@itu.edu.tr	Monday	
<i>Course Book</i>	<i>Turkish</i>	Erkek, C. ve Ağırlioğlu, N., Su Kaynakları Mühendisliği, Beta Yay., 1998 (3.Baskı)						
	<i>English</i>	Yanmaz, A. M., 1997, Applied Water Resources Engineering, METU PRESS, First Edition						
<i>Recommended Books</i>		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 (%)	Ingredients
Assignment	2	30	
Midterm Exam	2	70	
Quiz			
Experiment/Exercise			
Another			
Requirement for Final Exam: attendance to classes at least 70% and assignments should be at desired level			
<i>Contribution of in term activities to final grade (%)</i>		<i>Contribution of final exam to final grade (%)</i>	
50		50	
		<i>Final grade (%)</i>	
		100	

Weeks	TOPIC	EXERCISES	Turkish Course Book (pages)	English Course Book (pages)
1	Introduction to Water Resources	Water requirements	13-46	1-3
2	Reservoirs	Active storage	212-248	7-15
3	Reservoirs	Dead storage	212-248	15-24
4	Dams	Acting forces	164-210	29-56
5	Spillways, Gates	Stability analysis	164-210	56-105
6	Weirs	Stability analysis	164-210	121-145
7	Sediment transport	1. Midterm Exam (November 05, 2012)	49-73	109-119
8	Irrigation	Requirement for irrigation	313-324	283-295
9	Irrigation	Design of irrigation networks	313-324	295-306
10	Drainage	Design of drainage	325-333	311-326
11	Hydropower	Design of hydroelectric plants	291-312	329-334
12	Hydropower	2. Midterm Exam (December 03, 2012)	291-312	334-339
13	Flood control	Calculation of flood control facilities	111-136	341-352
14	Economic analysis	Example of economic analysis	335-349	357-364