



Course Weekly Outline

Name	Mr. Nabil Alhamdani			
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Course name	Water Supply Engineering			
General course objective	1- To develop problem solving skills and understanding of Fluid Mechanics in civil engineering. 2- This course deals with the basic concepts of Fluid Mechanics. 3- This is the basic subject for all electrical and electronic circuits. 4- To understand viscous fluid flow problems.			
Course description/ special objectives	1- To understand the general principles of fluid mechanics 2- To understand the incompressible and compressible flow 3- To understand flow through pipes and open channel			
References	Fluid Mechanics, Streeter Fluid Mechanics, White, F.M., 2016			
External sources	Fluid Mechanics, Streeter Fluid Mechanics, White, F.M., 2016			
Course assessment	Lab.	Assignments and quizzes	Midterm Exam	Final exam
		40	10	50
General notes				



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Week No.	Theoretical	Experimental	Aims
1	Introduction		This module covers a wide range of topics of fluid mechanics in order to offer basic knowledge and foundations applicable to various civil engineering problems. This module introduces fundamental of conservation (mass, momentum and energy) laws of fluid flow, potential (ideal) flow, inviscid compressible flow and viscous flow.
2	Population prediction		
3	Water consumption		
4	Water Quality		
5	Planning and Q-design		
6	Head losses and Equivalent pipes		
7	Valves and fittings		
8	Section and circle Methods		
9	Hardy-Cross Method		
10	Implementation of Water Supply Network		
11	Collection & Purification works I		
12	Purification works II		
13	Elevated tanks		
14	Elevated tanks		
15	Mid-Term Exam		