Republic of Iraq

Ministry of Higher
Education and Scientific
Research
Supervision and Scientific
Evaluation Apparatus



College: Shatt Al-Arab University College

Department: Civil Engineering

Stage: 2nd stage

Lecturer name: M.Sc. Qasim Mohammed

Khudair

Academic title: Ass. Lecturer

Course Weekly Outline

Name	M.Sc. Qasim Mohammed Khudair						
E-mail address	qasim.muhamad@sa-uc.edu.iq						
Course name	Fluid Mechanics-2						
General course objective	 To develop problem solving skills and understanding of Fluid Mechanics in civil engineering. This course deals with the basic concepts of Fluid Mechanics. This is the basic subject for all electrical and electronic circuits. To understand viscous fluid flow problems. 						
Course description /special objectives	 1- To understand general principles of fluid mechanics 2- To understand 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.	Quizzes	Assignments	Report	Mid-term exam	Final exam	
	10	10	10	10	10	50	
General notes				ı	1		

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Week No.	Theoretical	Experimental	Aims			
1	Applications of Bernoulli's	Applications of Bernoulli's	in us of w, w.			
	equation	equation	cs rio tal filo filo			
2	Applications of Bernoulli's	Applications of Bernoulli's	ani va va lententententententententententententente			
<u> </u>	equation	equation	ch to am am flui flui origi			
3	Applications of Bernoulli's	Applications of Bernoulli's	me lble lble lble lble lble lble lble lb			
3	equation	equation	fluid mechanics in applicable to various uces fundamental of laws of fluid flow, w and viscous flow.			
4	Discharge measurements	Discharge measurements	flu pppl aw aw v a			
5	Discharge measurements	Discharge measurements	a wide range of topics of fluid mechanics nowledge and foundations applicable to vario blems. This module introduces fundamental momentum and energy) laws of fluid flo, inviscid compressible flow and viscous flo complemented by lab classes and tutorials			
6	Momentum equation	Momentum equation	cs ion ntre rgy rgy le f			
7	Laminar and turbulent flow	Laminar and turbulent flow	opi dat dat e ii e ii ene sne ab			
8	Laminar and turbulent flow	Laminar and turbulent flow	covers a wide range of topics of basic knowledge and foundations ing problems. This module introd (mass, momentum and energy) al) flow, inviscid compressible flo is also complemented by lab classe			
9	Flow through pipes, Major	Flow through pipes, Major and	e c d fc mo an an mp d b			
9	and minor head losses	minor head losses	ang ang ang lim lim co			
10	Flow through pipes, Major	Flow through pipes, Major and	e ra lge Tr nntu			
10	and minor head losses	minor head losses	ride led led ns. me wise			
11	Flow through pipes, Major	Flow through pipes, Major and	a w ow ow owler older inv			
11	and minor head losses	minor head losses	rs s kn rob rob s, , ,			
12	Flow through pipes, Major	Flow through pipes, Major and	covers basic kr ing pro (mass, al) flow is also c			
	and minor head losses	minor head losses	cc cc ling (n)			
13	Open channel flow	Open channel flow	ule fer nee ion ide ile			
14	Open channel flow	Open channel flow	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. This module is also complemented by lab classes and tutorials			
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15	Open channel flow	Open channel flow	Thi ord civ cor pot Thi			