## Republic of Iraq

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



University: Shatt Al-Arab University College: College of Engineering Department: Civil Engineering

Stage: 1st stage

Lecturer name: Feras Abbas Lefta Academic title: Assist. Lecturer

## **Course Weekly Outline**

Name	Feras Abbas Lefta					
E-mail address	feras.abbass@sa-uc.edu.iq					
Course name	Engineering Mechanics -1-					
Course objective	<ol> <li>To introduce the basic principles of forces and motions and how they affect objects.</li> <li>To develop the ability to solve engineering problems using basic concepts of mechanics.</li> <li>To introduce the basic concepts of structural analysis and design of structural elements.</li> <li>To improve the ability to think critically and analytically.</li> <li>To train students to use modern tools and techniques in solving engineering problems.</li> </ol>					
Course description	<ul><li>1- To understand the general principles of engineering mechanics.</li><li>2- To understand and solve engineering problems.</li></ul>					
References	1. Hibbeler R. C., Engineering Mechanics, Statics, 14th ed, 2015 2. M. E. Plesha, Engineering Mechanics Statics, 1st ed, 2010 3. A. Bedford, Engineering Mechanics Statics, 5th ed, 2008					
External sources	<ol> <li>Hibbeler R. C., Engineering Mechanics, Statics, 14th ed, 2015</li> <li>M. E. Plesha, Engineering Mechanics Statics, 1st ed, 2010</li> <li>A. Bedford, Engineering Mechanics Statics, 5th ed, 2008</li> </ol>					
Course assessment	Homework	Project	Quizzes and assessment	Mid-term exam	Final exam	
23322333333333	10	10	20	10	50	
General notes		1	1		•	

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Week No.	Theoretical	Experimental	Aims		
1	Introduction		ng sic to to as ss,		
2	Introduction		eering; basic ole to ich as (mass,		
3	Force Analysis		This module covers a wide range of engineering mechanics topics in order to provide the basic knowledge and foundations applicable to various civil engineering problems, such as Newton's laws and basic conservation (mass, momentum and energy).		
4	Force Analysis				
5	Force Analysis				
6	Equilibrium		ge pro s s obbl		
7	Equilibrium		s a wide rang n order to p foundations neering pro d basic cons ergy).		
8	Equilibrium		de de ler lati		
9	Equilibrium		wi ord unc erri erri bas gy)		
10	Trusses		vers a wide ss in order d founda ngineering and basic energy).		
11	Trusses		e covers a wide topics in order and foundat il engineering aws and basic and energy).		
12	Trusses		fule covers topic ge and civil er civil er s laws am and		
13	Trusses		odh nice edg s c s c n's ntu		
14	Trusses		This module mechanics knowledge various civ Newton's la momentum		
15	Trusses		Thi me knc var var Ne		