## 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 -2-					
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	1- To understand the general principles of engineering mechanics. 2- To understand and solve engineering problems.					
References	<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>					
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	
	10	10	20	10	50	
General notes					•	

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Week No.	Theoretical	Experimental	Aims
1	Friction		ring asic fous aws and tof
2	Friction		i i i i i i i i i i i i i i i i i i i
3	Friction		of engineeri ovide the ba cable to varic s Newton's la momentum a and moment
4	Friction		eng to to wto wto entu
5	Friction		nge of e provide olicable as New mome ity and 1
6	Friction		range of applicable uch as Ne ass, mom avity and
7	Centroid		
8	Centroid		I S C II
9	Centroid		wide order ations ems, son (me of gr
10	Centroid		on on one
11	Centroid		covers a wide and foundations ering problems, conservation (notion, centre of g
12	Moment of Inertia		dule covers se topics in ge and four ineering proic ic conserva friction, cer
13	Moment of Inertia		
14	Moment of Inertia		noonic noonic sedge as in the
15	Moment of Inertia		This mc mechani knowled civil eng and bas energy), inertia.