Republic of Iraq

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

College: Shatt Al-Arab University
Department: Civil Engineering
Stage: 2nd stage
Lecturer name: Dr. Jasim Mohsin Yasir
Academic title: Lecturer

Course Weekly Outline

Name	Dr. Jasim Mohsin Yasir			
E-mail address	jasimmohsen@sa-uc.edu.iq			
Course name	Mechanics of Materials 1			
Course objective	The course aims to provide principles about the calculation of stresses and strains resulting from forces, temperature, torsion, etc.			
Course description	A-Learning outcome A1- Calculation of stresses and strains in axially-loaded members. A2- Calculation of stresses resulting from temperature change. A3- Calculation of stresses in thin-walled cylinders. A4- Calculation of stresses resulting from torsion and calculation of principal stresses and principal planes.			
References	1.Strength of Materials 2. Mechanics of Materials , R.C. Hibbeler.			
External sources	1.Strength of Materials 2. Mechanics of Materials , R.C. Hibbeler.			
Course assessment	**Lab.**	**Quizzes and assessment**	**Mid-term exam**	**Final exam**
		40	**10**	**50**
General notes				

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Week No.	Theoretical	Experimental	Aims
1	Introduction stress and strain		The course aims to provide principles about the calculation of stresses and strains resulting from forces, temperature, torsion, etc.
2	Introduction stress and strain		
3	Applications to		
4	Axially Loaded Members		
5	Applications to		
6	Axially Loaded Members		
7	Introduction to concepts Thin Walled Cylinders		
8	Introduction to concepts Thin Walled Cylinders		
9	Shear Stresses resulting from Torsion		
10	Shear Stresses resulting from Torsion		
11	Shear Stresses resulting from Torsion		
12	Introduction to stress transformation and principal stresses		
13	Introduction to stress transformation and principal stresses		
14	Introduction to stress transformation and principal stresses		
15	Introduction to stress transformation and principal stresses		