

Republic of Iraq

The Ministry Of Higher Education
& Scientific Research

بسم الله الرحمن الرحيم



University: Diyala

College: Engineering

Department: Chemical

Stage: First

Lecturer name: Khalid Al-Dolaimy

Qualification: M. Sc.

Place of work: Diyala University

Flow up of syllabus implementation

Course Instructor	Khalid Ahmed Al-Dolaimy				
E-mail	K.dolaimy@gmail.com				
Title	Static and Strength of Materials				
Course Coordinator	Annually				
Course Objective	To teach the student the fundamentals of statics; Principles of Force, Force Distribution, Reactions, and it's effect on the Mechanical Systems and Structures, leading for better designs within safety limits.				
Course Description	<p>Static: Introduction to statics science, force and force analysis, couples, equilibrium, moments, friction, center of Mass, center of gravity, moment of inertia.</p> <p>Strength of Materials: Strength of materials definition, simple stress, shear stress, stress in cylinder, simple strain, thermal stress, deformation in beams, equation of stress and moment in beams, curves of stress and moment in beams</p>				
Textbook	<p>١- SI Version, J. L. Meriam, L.G. Kraige, Engineering Mechanics, Volume ١, John Wiley and Sons Inc. ٢٠٠٨</p> <p>٢- Ferdinand L. Singer, Andrew Pytel, Strength of Materials, HRPER & ROW Publisher, New York, ١٩٨٠</p>				
Course Assessments	Term Tests	Laboratory	Quizzes	Project	Final Exam
	(٣٠%)	-	(١٠%)	-	(٦٠%)
General Notes					

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University: Diyala
College: Engineering College
Department: Chemical Engineering
Stage: First
Lecturer name: Khalid Ahmed
Qualification: M. Sc./Production Eng.
Place of work: Engineering College

Course Weekly Outline

Week	Date	Topics Covered	Lab. Experiment Assignments	Notes
١	١٦-١١-٢٠١٤ , ١٩-١١-٢٠١٤	Introduction, Vectors	Related Ex. & Assignments	
٢	٢٣-١١-٢٠١٤ , ٢٦-١١-٢٠١٤	Force, Force analysis,	=	
٣	٣٠-١١-٢٠١٤ , ٣-١٢-٢٠١٤	Force in ٣ D	=	
٤	٧-١٢-٢٠١٤ , ١٠-١٢-٢٠١٤	Moment	=	
٥	١٤-١٢-٢٠١٤ , ١٧-١٢-٢٠١٤	Couples	=	
٦	٢١-١٢-٢٠١٤ , ٢٤-١٢-٢٠١٤	Equilibrium	=	
٧	٢٨-١٢-٢٠١٤ , ٣١-١٢-٢٠١٤	Monthly Exam, and Friction	=	
٨	٤-١-٢٠١٥ , ٧-١-٢٠١٥	Friction - atilt surfaces	=	
٩				
١٠				
١١				
١٢				
١٣				
١٤				
١٥				
١٦				
Half – year break				
١٧	١٥-٢-٢٠١٥ , ١٨-٢-٢٠١٥	Center of mass & gravity	Related Ex. & Assignments	
١٨	٢٢-٢-٢٠١٥ , ٢٥-٢-٢٠١٥	Centroid-Center of area	=	
١٩	١-٣-٢٠١٥ , ٤-٣-٢٠١٥	Moment of inertia	=	
٢٠	٨-٣-٢٠١٥ , ١١-٣-٢٠١٥	Strength of materials Def., Simple stress	=	
٢١	١٥-٣-٢٠١٥ , ١٨-٣-٢٠١٥	Shear stress, Stress in cylinder	=	
٢٢	٢٢-٣-٢٠١٥ , ٢٥-٣-٢٠١٥	Simple strain,	=	
٢٣	٢٩-٣-٢٠١٥ , ١-٤-٢٠١٥	Stresses in composite material	=	
٢٤	٥-٤-٢٠١٥ , ٨-٤-٢٠١٥	Shear strain	=	
٢٥	١٩-٤-٢٠١٥ , ٢٢-٤-٢٠١٥	Monthly exam /Thermal stress	=	
٢٦	٢٦-٤-٢٠١٥ , ٢٩-٤-٢٠١٥	Forces on beams & Reactions	=	
٢٧	٣-٥-٢٠١٥ , ٦-٥-٢٠١٥	Shear force & Bending moment diagrams	=	
٢٨	١٠-٥-٢٠١٥ , ١٣-٥-٢٠١٥	Equation of Stress and Moment in beams	=	
٢٩	١٧-٥-٢٠١٥ , ٢٠-٥-٢٠١٥	Curves of stress and Moment in beams	=	
٣٠	٢٤-٥-٢٠١٥ , ٢٧-٥-٢٠١٥	Deformation- Simply supported beams	=	

31	31-5-2015, 3-6-2015	Deformation /one side supported beams	=	
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INSTRUCTOR Signature:
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