

Date:	Examination No.:	Version: 6/1/2024	Start: 7/1/2024
<b>Module Name - Code</b>	Engineering mechanics-1 - 1106		
<b>Module Language:</b>	English		
<b>Responsible:</b>			
<b>Lecture (s):</b>	Dr. Zrar Sedeeq Othman and M. Shvan		
<b>College:</b>	College of Engineering – Salahaddin University-Erbil		
<b>Duration:</b>	15 week – 1 semester		
<b>Course outcomes:</b>	<p>After learning this course, the student should have the ability to:</p> <ol style="list-style-type: none"> <li>1. Solve for the resultants of any force systems.</li> <li>2. Determine equivalent force systems.</li> <li>3. Solve the problems associated with the equilibrium of particles and the equilibrium of rigid bodies.</li> <li>4- Analyze the simple trusses.</li> </ol>		
<b>Course Content:</b>	Week Lecture		
	1 <sup>st</sup>	Introduction and fundamental concepts, and Composition and Resolution of forces	
	2 <sup>nd</sup>	Resultant of Force system, Collinear, Concurrent Coplanar	
	3 <sup>rd</sup>	Concurrent, Non-coplanar Force System	
	4 <sup>th</sup>	Non-Concurrent, Non-parallel Coplanar Force System	
	5 <sup>th</sup>	Moment of a couple	
	6 <sup>th</sup>	Parallel Coplanar and Parallel, Non-coplanar Force System	
	7 <sup>th</sup>	Midterm Exam	
	8 <sup>th</sup>	Distributed Load	
	9 <sup>th</sup>	Equilibrium of Particle-1	
	10 <sup>th</sup>	Equilibrium of Particle-2	
	11 <sup>th</sup>	Equilibrium of rigid bodies-1	
	12 <sup>th</sup>	Equilibrium of rigid bodies-1	
	13 <sup>th</sup>	Trusses-1	
	14 <sup>th</sup>	Trusses-2	
15 <sup>th</sup>	Final Exam		
<b>Literature:</b>	<ol style="list-style-type: none"> <li>1. R.C. Hibbeler, “Engineering Mechanics, Statics”, 15th edition in SI units, 2023, Pearson Education Limited.London</li> <li>2. J.L. Meriam, L.G. Kraige, “Engineering Mechanics, Statics”, 6th edition, 2006.</li> </ol>		
<b>Type of Teaching:</b>	3 hrs theory and 1 hr tutorial		
<b>Pre-requisites:</b>			
<b>Frequency:</b>	Yearly in fall and spring semester		
<b>Requirements for credit points:</b>	<p>For the award of credit points, it is necessary to pass the module exam.  The module exam is theoretical: [Written 120 min]  <b>Student's attendance is required in all classes.</b></p>		
<b>Credit point:</b>	5		
<b>Grade Distribution:</b>	<p>The Grade is generated from the examination result(s) with the following</p> <ul style="list-style-type: none"> <li>10% activity</li> <li>10% quizzes</li> <li>20% mid-term exam</li> <li>60% final Exam</li> </ul>		
<b>Work load:</b>	The workload is 135 hrs. It is the result of 60 hrs. attendance and 75 hrs. self-studies.		