

	Ministry of Higher Education and Scientific Research - Iraq Al-Mustaqlal University College of Engineering Department of Prosthetics and Orthotics Engineering	
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## MODULE DESCRIPTOR FORM

### نموذج وصف المادة الدراسية

<b>Module Information</b> <b>معلومات المادة الدراسية</b>				
<b>Module Title</b>	فيزياء		<b>Module Delivery</b>	
<b>Module Type</b>	<b>BASIC</b>		<input checked="" type="checkbox"/> Theory <input type="checkbox"/> Lecture <input type="checkbox"/> Lab <input checked="" type="checkbox"/> Tutorial <input checked="" type="checkbox"/> Practical <input type="checkbox"/> Seminar	
<b>Module Code</b>	<b>UOMU0103013</b>			
<b>ECTS Credits</b>	<b>6</b>			
<b>SWL (hr/sem)</b>	<b>150</b>			
<b>Module Level</b>	1	<b>Semester of Delivery</b>	1	
<b>Administering Department</b>	UOMU0103	<b>College</b>	UOMU01	
<b>Module Leader</b>	Mariam Ghassan Ghaffar		<b>e-mail</b>	mariam.ghassan.ghaffar@uomus.edu.iq
<b>Module Leader's Acad. Title</b>	Asst. Lect.	<b>Module Leader's Qualification</b>		MSc.
<b>Module Tutor</b>				
<b>Peer Reviewer Name</b>		<b>e-mail</b>		
<b>Review Committee Approval</b>	/06/2023	<b>Version Number</b>	1.0	

<h3 style="text-align: center;">Relation With Other Modules</h3> <p style="text-align: center;">العلاقة مع المواد الدراسية الأخرى</p>			
<b>Prerequisite module</b>	None		
<b>Co-requisites module</b>	None		
<h3 style="text-align: center;">Module Aims, Learning Outcomes and Indicative Contents</h3> <p style="text-align: center;">أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية</p>			
<b>Module Aims</b> أهداف المادة الدراسية	<p>1. Understanding the fundamental principles of mechanical physics. Developing a strong foundation in physics that students can build upon in future studies.</p>		
<b>Module Learning Outcomes</b> مخرجات التعلم للمادة الدراسية	<p>1. Analyze the properties of forces, moments, couples, and resultants in 2D. 2. Analyze the properties of forces, moments, couples, and resultants in 3D 3. Solve equilibrium problems in 2D. 4. Solve equilibrium problems in 3D.</p> <p style="text-align: right;">Understand basic concepts of the dynamics.</p>		
<b>Indicative Contents</b> المحتويات الإرشادية	<p>Indicative content includes the following.</p> <ul style="list-style-type: none"> <li>- The fundamental concepts necessary for the study of Physics.</li> <li>- The properties of forces, moments, couples, and resultants in 2D &amp;3D</li> <li>- The equilibrium principles of structures.</li> <li>- The dynamic characteristics.</li> </ul>		
<h3 style="text-align: center;">Learning and Teaching Strategies</h3> <p style="text-align: center;">استراتيجيات التعلم والتعليم</p>			
<b>Strategies</b>	<p>The main strategy that will be adopted in delivering this module is to encourage students' participation in the exercises, while at the same time refining and expanding their critical thinking skills. This will be achieved through classes, interactive tutorials and by considering type of simple experiments involving some sampling activities that are interesting to the students.</p>		

<h3 style="text-align: center;">Student Workload (SWL)</h3> <p style="text-align: center;">الحمل الدراسي للطالب</p>			
<b>Structured SWL (h/sem)</b> الحمل الدراسي المنتظم للطالب خلال الفصل	108	<b>Structured SWL (h/w)</b> الحمل الدراسي المنتظم للطالب أسبوعيا	7
<b>Unstructured SWL (h/sem)</b> الحمل الدراسي غير المنتظم للطالب خلال الفصل	42	<b>Unstructured SWL (h/w)</b> الحمل الدراسي غير المنتظم للطالب أسبوعيا	2
<b>Total SWL (h/sem)</b> الحمل الدراسي الكلي للطالب خلال الفصل	150		

## Module Evaluation

تقييم المادة الدراسية

		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	Quizzes	2	10% (10)	5, 10	LO #1-3
	Assignments	2	10% (10)	2, 12	LO # 1-3
	Projects / Lab.	1	10% (10)	Continuous	All
	Report	1	10% (10)	13	LO # 2-4
Summative assessment	Midterm Exam	2 hr	10% (10)	7	LO # 1
	Final Exam	3hr	50% (50)	16	All
<b>Total assessment</b>		100% (100 Marks)			

## Delivery Plan (Weekly Syllabus)

المنهاج الأسبوعي النظري

	Material Covered
<b>Week 1</b>	Introduction to Physics and Basic Concepts
<b>Week 2</b>	Scalars and Vectors
<b>Week 3</b>	Scalars and Vectors
<b>Week 4</b>	Newton's Laws and Units
<b>Week 5</b>	Rectangular Components of force in 2D
<b>Week 6</b>	Moment and Couple in 2D
<b>Week 7</b>	Mid-term Exam + Resultants in 2D
<b>Week 8</b>	Rectangular Components of force in 3D
<b>Week 9</b>	Moment, Couple and Resultants in 3D
<b>Week 10</b>	Equilibrium in two dimensions
<b>Week 11</b>	Equilibrium in two dimensions
<b>Week 12</b>	Equilibrium in three dimensions
<b>Week 13</b>	Equilibrium in three dimensions
<b>Week 14</b>	Introduction to dynamics.
<b>Week 15</b>	Introduction to dynamics

## Delivery Plan (Weekly Lab. Syllabus)

المنهاج الاسبوعي للمختبر

	Material Covered
<b>Week 1</b>	Workshop A
<b>Week 2</b>	Workshop A
<b>Week 3</b>	Workshop B
<b>Week 4</b>	Workshop B
<b>Week 5</b>	Workshop C
<b>Week 6</b>	Workshop D
<b>Week 7</b>	Workshop E
<b>Week 8</b>	
<b>Week 9</b>	
<b>Week 10</b>	
<b>Week 11</b>	
<b>Week 12</b>	
<b>Week 13</b>	
<b>Week 14</b>	
<b>Week 15</b>	

## Learning and Teaching Resources

مصادر التعلم والتدريس

	Text	Available in the Library?
<b>Required Texts</b>	Engineering Mechanics STATICS J.L.Meriam And L.G.Kraige	Yes
<b>Recommended Texts</b>	ENGINEERING MECHANICS: STATICS BY RUSSELL HIBBELER.	No
<b>Websites</b>		

**APPENDIX:**

<b>GRADING SCHEME</b> <b>مخطط الدرجات</b>				
<b>Group</b>	<b>Grade</b>	التقدير	<b>Marks (%)</b>	<b>Definition</b>
<b>Success Group (50 - 100)</b>	<b>A - Excellent</b>	امتياز	90 – 100	Outstanding Performance
	<b>B - Very Good</b>	جيد جدا	80 – 89	Above average with some errors
	<b>C - Good</b>	جيد	70 – 79	Sound work with notable errors
	<b>D - Satisfactory</b>	متوسط	60 – 69	Fair but with major shortcomings
	<b>E - Sufficient</b>	مقبول	50 – 59	Work meets minimum criteria
<b>Fail Group (0 – 49)</b>	<b>FX – Fail</b>	مقبول بقرار	(45-49)	More work required but credit awarded
	<b>F – Fail</b>	راسب	(0-44)	Considerable amount of work required
<b>Note:</b>				
Marks Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The University has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.				



**ملاحظة: هذا النموذج تم وضعه وتقديمه من قبل مديرية ضمان الجودة في وزارة التعليم العالي والبحث العلمي**