

## MODULE DESCRIPTOR FORM

### نموذج وصف المادة الدراسية

Module Information			
معلومات المادة الدراسية			
Module Title	<b><i>Engineering Physics</i></b>		Module Delivery
Module Type	<b>SUPLEMENT</b>		<input checked="" type="checkbox"/> Theory <input type="checkbox"/> Lecture <input type="checkbox"/> Lab <input checked="" type="checkbox"/> Tutorial <input type="checkbox"/> Practical <input type="checkbox"/> Seminar
Module Code	UOMU0203014		
ECTS Credits	4		
SWL (hr/sem)	100		
Module Level	UGI	Semester of Delivery	1
Administering Department	Building and construction techniques	College	Al-Mustaqlbal university
Module Leader	Assist. lec Fatima Muslim Hadi		e-mail fatima.muslim.hadi@uomus.edu.iq
Module Leader's Acad. Title	Ass.lecture		Module Leader's Qualification <i>None</i>
Module Tutor	<i>None</i>		e-mail <i>None</i>
Peer Reviewer Name			e-mail
Review Committee Approval	01/10/2025	Version Number	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>Semester</b>	
<b>Co-requisites module</b>	None	<b>Semester</b>	
<h3 style="text-align: center;">Module Aims, Learning Outcomes and Indicative Contents</h3> <p style="text-align: center;">أهداف المادة الدراسية ونتائج التعلم والمحفوبيات الإرشادية</p>			
<b>Module Aims</b> أهداف المادة الدراسية	<p>After successful completion of this course the student will be able to understand:</p> <ol style="list-style-type: none"> <li>1. student's knowledge of Units, Physical Quantities and Vectors.</li> <li>2. Demonstrates knowledge of Standards and Units, Utilization of Units and conversions.</li> <li>3. definition of linear motion equation.</li> <li>4. He will be able compute 2-D and 3-D Motion.</li> <li>5. definition of Newton's Law.</li> <li>6. Implements the Applications of Newton's Law.</li> <li>7. knowledge and calculation of work and Kinetic Energy.</li> <li>8. He will be able calculation of the Potential Energy and Conservation of Energy knowledge and calculation of the Momentum, Impulse and Collisions.</li> <li>9. definition of and calculation of the Rotational motion of Rigid Bodies and calculation of the Rotational Kinematics.</li> </ol>		
<b>Module Learning Outcomes</b> مخرجات التعلم للمادة الدراسية	The ability to convert units in various systems Distinguish between different physical quantities and the standards that define these quantities The ability of the student to solve the problems of the linear equation and the two- and three dimensional kinetic equations. Implementing applied problems on Newton's law and solving potential energy and momentum issues And how to solve the problems of rotational motion of solid bodies		
<b>Indicative Contents</b> المحفوبيات الإرشادية	Preparing the student to continue self-learning, acquiring skills and developing his potential		
<h3 style="text-align: center;">Learning and Teaching Strategies</h3> <p style="text-align: center;">استراتيجيات التعلم والتعليم</p>			
<b>Strategies</b>	Assessment is based on 4. Exams. 2 Student feedback. 3 Homework's		

Student Workload (SWL) الحمل الدراسي للطالب			
<b>Structured SWL (h/sem)</b> الحمل الدراسي المنتظم للطالب خلال الفصل	63	<b>Structured SWL (h/w)</b> الحمل الدراسي المنتظم للطالب أسبوعيا	4.2
<b>Unstructured SWL (h/sem)</b> الحمل الدراسي غير المنتظم للطالب خلال الفصل	37	<b>Unstructured SWL (h/w)</b> الحمل الدراسي غير المنتظم للطالب أسبوعيا	2.5
<b>Total SWL (h/sem)</b> الحمل الدراسي الكلي للطالب خلال الفصل	100		

Module Evaluation تقييم المادة الدراسية					
		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
<b>Formative assessment</b>	<b>Quizzes</b>	2	10% (10)	3,5,6,10	
	<b>Assignments</b>	2	10% (10)	7, 8	
	<b>Tutorial</b>	1	10% (10)	Continuous	
	<b>Report</b>	1	10% (10)	13	
<b>Summative assessment</b>	<b>Midterm Exam</b>	2 hr	10% (10)	12	
	<b>Final Exam</b>	3 hr	50% (50)	16	
<b>Total assessment</b>		100% (100 Marks)			

Delivery Plan (Weekly Syllabus) المنهاج الأسبوعي النظري	
	Material Covered
Week	Syllabus
<b>1</b>	1Demonstrates knowledge about the introduction and Scope of Physics 1, Units, Physical Quantities and Vectors
<b>2</b>	Demonstrates knowledge of Standards and Units, Utilization of Units and conversions.
<b>3</b>	Demonstrates knowledge and implementation of the Linear Motion.

<b>4</b>	Demonstrates knowledge and compute 2-D and 3-D Motion.
<b>5</b>	Demonstrates knowledge about Newton's Law.
<b>6</b>	Review and solution of the homework.
<b>7</b>	Demonstrates knowledge and calculation of work and Kinetic Energy.
<b>8</b>	Demonstrates knowledge and calculation of work and Kinetic Energy.
<b>9</b>	Demonstrates knowledge and calculation of the Potential Energy and Conservation of Energy.
<b>10</b>	Demonstrates knowledge and calculation of the Momentum, Impulse and Collisions.
<b>11</b>	Demonstrates knowledge and calculation of the Rotational motion of Rigid Bodies.
<b>12</b>	Demonstrates knowledge and calculation of the Rotational Kinematics.
<b>13</b>	Demonstrates knowledge and calculation of the Rotational Kinematics.
<b>14</b>	general review
<b>15</b>	<b>prepare to final exam</b>

### Learning and Teaching Resources

مصادر التعلم والتدریس

	Text	Available in the Library?
<i>Required Texts</i>	Lectures prepared by the teacher	Yes
<i>Recommended Texts</i>	book_Bueche,_Frederick_Hecht,_Eugene_Schaums_Outline _of _College	No
<i>Websites</i>		

### APPENDIX:

GRADING SCHEME				
مخطط الدرجات				
Group	Grade	التقدير	Marks (%)	Definition
Success Group (50 - 100)	A - Excellent	امتياز	90 - 100	Outstanding Performance
	B - Very Good	جيد جدا	80 - 89	Above average with some errors
	C - Good	جيد	70 - 79	Sound work with notable errors
	D - Satisfactory	متوسط	60 - 69	Fair but with major shortcomings
	E - Sufficient	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

Note:

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