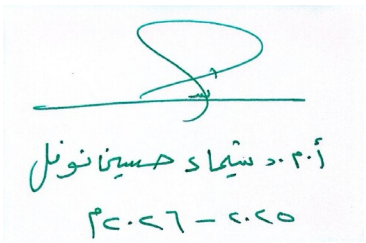
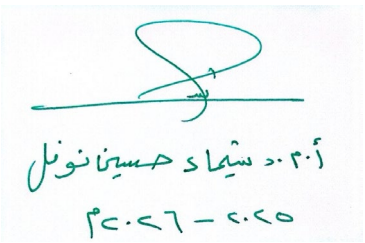
MODULE DESCRIPTION FORM

Module Information					
Module Title	**Mechanics**			**Module Delivery**	
Module Type	**Core**			☒ **Theory** ☒ **Lab** ☒ **Tutorial** ☐ **Practical** ☒ **Seminar**	
Module Code	**MPH101**				
ECTS Credits	**9**				
SWL (hr/sem)	**225**				
Module Level	1		**Semester of Delivery**	1	
Administering Department	Medical Physics		**College**	College of Sciences	
Module Leader	Alhanoof S.Shakir		**e-mail**	alhanoof.salam@uowa.edu.iq	
Module Leader's Acad. Title	Asst. lect		**Module Leader's Qualification**	MS.c	
Module Tutor	Asst. lect. Alhanoof S.Shakir		**e-mail**	alhanoof.salam@uowa.edu.iq	
Peer Reviewer Name	Ismail Eldesoky		**e-mail**	ismail.m@uowa.edu.iq	
Scientific Committee Approval Date	2025-12-20		**Version Number**	V 1.0	

Relation with other Modules			
Prerequisite module	None	**Semester**	-
Co-requisites module	None	**Semester**	-





Department Head Approval

Dean of the College Approval

Module Aims, Learning Outcomes and Indicative Contents	
Module Objectives	The course aims to provide students with information and skills in mechanics necessary for the undergraduate level. building a strong background for those who will continue to study materials related to analytical mechanics applications
Module Learning Outcomes	The outcomes of study weeks. 1. Learning about mechanics in general physics. 2. Listing the different terms associated with mechanics. 3. Summarizing what is meant by basic mechanics. 4. Discussion, body power, power, and energy of work. 5. Descriptions of newtons laws. 6. Selecting sample machines. 7. Identifying the basic circuit elements and their applications. 8. The ability for making and managing discussions. 9. The good Explanation of density and elasticity
Indicative Contents	- Providing students with the basics and additional topics related to the outputs of thinking. -Directing questions to the students and forming discussion groups during the lectures to discuss the solution of the question that requires - Thinking and analyzing. - Giving students homework to solve questions that require self-explanations. - Assigning students to prepare reports related to the course - Applying theoretical concepts in various physical issue

Learning and Teaching Strategies	
Strategies	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

Student Workload (SWL)			
Structured SWL (h/sem)	90	**Structured SWL (h/w)**	6
Unstructured SWL (h/sem)	132	**Unstructured SWL (h/w)**	9
Total SWL (h/sem)	222 + 3 final = 225		

Module Evaluation

		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	Quizzes	5	10% (2)	3,5,9,10,13	1,2,3,6,7
	Lab	4	8% (2)	4,6,7,13	3,6,7,8
	Online Assig.	3	6% (2)	3,8,12	3,4,5,6
	Reports	10	10% (1)	3,4,5,8,9,10,11,12,13,14	1 - 9
	Seminar	2	6% (3)	All	1 - 9
Summative assessment	Midterm Exam	1hr	10% (10)	7	
	Final Exam	3hr	50% (50)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus)

	Material Covered
Week 1	INTRODUCTION TO VECTORS
Week 2	UNIFORMLY ACCELERATED MOTION
Week 3	NEWTONS LAWS
Week 4	EQUILIBRIUM UNDER THE ACTION CONCURRENT FORCES
Week 5	EQUILBRIUM OF A RIGED BODY COPLANAR FORCES
Week 6	WORK ENERGY AND POWER
Week 7	SAMPLE MACHINES
Week 8	Mid - term exam
Week 9	IMPULSE AND MOMENTUM
Week 10	ANGULAR MOTION IN A PLANE
Week 11	RIGID- BODY ROTATION
Week 12	DENSITY: ELASTICITY I
Week 13	DENSITY: ELASTICITY II
Week 14	FLUIDS AT REST
Week 15	FLUIDS IN MOTION
Week 16	Final exam

Delivery Plan (Weekly Lab. Syllabus)	
	Material Covered
Week 1	EXP 1: Boyle's Law
Week 2	EXP 2: The Simple pendulum
Week 3	EXP 3: The Spiral Spring
Week 4	EXP 4: Static Torsion
Week 5	EXP 5: Vector Force Table
Week 6	Discussion for the experiments (1-3)
Week 7	Discussion for the experiments (4-5)
Week 8	EXP 6: ARCHIMEDES' PRINCIPAL EXPERIMENT
Week 9	EXP 7: Surface tension
Week 10	EXP 8: Viscosity of liquids
Week 11	EXP 9: Rotational motion
Week 12-13	EXP 10: Coefficient of fraction
Week 14	Discussion for the experiments (6-8)
Week15	Discussion for the experiments (9-10)
Week 16	Final Exam

Learning and Teaching Resources		
	Text	**Available in the Library?**
Required Texts	Schaum's outlines of theory and problems of college physics	No
Recommended Texts	Lecture Notes on Classical Mechanics for Physics	No
Websites	https://sites.astro.caltech.edu/~golwala/ph106ab/ph106ab_notes.pdf	

Grading Scheme				
Group	**Grade**	التقدير	**Marks %**	**Definition**
Success Group (50 - 100)	**A -** Excellent	امتياز	90 - 100	Outstanding Performance
	B - Very Good	جيد جداً	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
Fail Group (0 – 49)	**FX –** Fail	راسب (قيد المعالجة)	(45-49)	More work required but credit awarded
	F – Fail	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.