	Ministry of Higher Education and Scientific Research - Iraq University of Warith Al-Anbiyaa College of Sciences Department of Medical Physics	

MODULE DESCRIPTOR FORM
نموذج وصف المادة الدراسية

Module Information معلومات المادة الدراسية					
Module Title	MECHANICS			**Module Delivery**	
Module Type	CORE			**Theory✓** **Lab✓** **Tutorial✓** **Seminar✓**	
Module Code	MPH101				
ECTS Credits	9				
SWL (hr/sem)	225				
Module Level	1		**Semester of Delivery**	1	
Administering Department	MPH101		**College**	College of Sciences	
Module Leader	Ahmed Mousa Jaafar		**e-mail**	ahmed.mo@uowa.edu.iq	
Module Leader's Acad. Title	Lecturer		**Module Leader's Qualification**	PhD in medical Physics	
Module Tutor	Asst. lect. Ahmed H. Hashim		**e-mail**	ahmad.hasan@uowa.edu.iq	
Peer Reviewer Name			**e-mail**		
Review Committee Approval	10-11-2023		**Version Number**	1	

Relation With Other Modules العلاقة مع المواد الدراسية الأخرى			
Prerequisite module	No	**Semester**	-
Co-requisites module	No	**Semester**	-
Module Aims, Learning Outcomes and Indicative Contents أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية			
Module Aims أهداف المادة الدراسية	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 مخرجات التعلم للمادة الدراسية	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 المحتويات الإرشادية	- 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 استراتيجيات التعلم والتعليم			
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) الحمل الدراسي للطالب			
Structured SWL (h/sem.) الحمل الدراسي المنتظم للطالب خلال الفصل	93	**Structured SWL (h/w)** الحمل الدراسي المنتظم للطالب أسبوعيا	6
Unstructured SWL (h/sem.) الحمل الدراسي غير المنتظم للطالب خلال الفصل	132	**Unstructured SWL (h/w)** الحمل الدراسي غير المنتظم للطالب أسبوعيا	9
Total SWL (h/sem.) الحمل الدراسي الكلي للطالب خلال الفصل	225		

Module Evaluation تقييم المادة الدراسية					
		Time/Number	**Weight (Marks)**	**Week Due**	**Relevant Learning Outcome**
Formative assessment	**Quizzes**	5	10	3,5,9,10,13	1,2,3,6,7
	Homework	3	6	3,8,12	3,4,5,6
	Seminar	2	6	all	all
	Discussion /experiments	4	8	4,6,7,13	3,6,7,8
	Report/lab	10	10	3,4,5,8,9,10,11,12, 13,14	all
Summative assessment	**Midterm Exam**	1	10	8	1,2,3,4,5
	Final Exam	3	50	16	all
Total assessment			100		

Delivery Plan (Weekly Syllabus) المنهاج الاسبوعي النظري	
	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	Med- term exam
Week 9	IMPULSE AND MOMENTUM
Week 10	ANGULAR MOTION IN A PLANE
Week 11	RIGID- BODY ROTATION
Week 12-13	DENSITY: ELASTICITY
Week 14	FLUIDS AT REST
Week 15	FLUIDS IN MOTION
Week 16	Final exam

Delivery Plan (Weekly Lab. Syllabus) المنهاج الأسبوعي للمختبر	
weeks	**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' PRINCIPLE 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 مصادر التعلم والتدريس		
	Text	**Available in the Library?**
Required Texts	Schaum's outlines of theory and problems of college physics	
Recommended Texts	Lecture Notes on Classical Mechanics for Physics	
Websites	https://sites.astro.caltech.edu/~golwala/ph106ab/ph106ab_notes.pdf	

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
Fail Group (0 – 49)	**FX** – Fail	مقبول بقرار	(45-49)	More work required but credit awarded
	F – Fail	راسب	(0-44)	Considerable amount of work required

Note:

NB 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