



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

أ.م. د. شياد حسين نوري

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	Medical Physics	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. Saja Basim Ali	e-mail	saja.b@uowa.edu.iq
Peer Reviewer Name	-	e-mail	-
Review Committee Approval	2023-2024	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	<ul style="list-style-type: none">- 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) المناهج 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 friction
Week 14	Discussion for the experiments (6-8)
Week 15	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