

نموذج وصف المقرر باللغة العربية

1. اسم المقرر

الفيزياء العامة

2. رمز المقرر

3. الفصل / السنة

فصلى

4. تاريخ إعداد هذا الوصف

2026/6/20

5. أشكال الحضور المتاحة

حضورى

(عدد الساعات الدراسية (الكلى)/ عدد الوحدات (الكلى) 6.

(عدد الساعات (5) ، عدد الوحدات (3)

(اسم مسؤول المقرر الدراسى (اذا اكثر من اسم يذكر 7.

م.م.علي صالح

8. اهداف المقرر

اهداف المادة الدراسية

1. Learn the standard units of measurements.
2. Define the Electricity & Magnetism.
3. Know the Gravitation and Kinetic Energy.
4. Define the Work-energy relation.
5. Know the Conservative and neoconservative forces.
6. Define Momentum, Impulse and Collisions.
7. Define Periodic Motion.
8. State and explain the Dynamics of Rotational Motion.
9. Define the heat and pressure.

9. استراتيجيات التعليم والتعلم

لاستراتيجية

10. بنية المقرر

طريقة التقييم	طريقة التعلم	اسم الوحدة او الموضوع	مخرجات التعلم المطلوبة	الساعات	لأسبوع
اسئلة عامة ومناقشة وامتحانات يومية	نظري + عملي	• Standard units of measurements – Length – Mass		نظري 2 عملي 3	الاول
اسئلة عامة ومناقشة بالاضافة الى جعل الطالب يطبق	نظري + عملي	• Electricity – Electrostatics ❖ Electrostatic Laws		نظري 2 عملي 3	الثاني

العملي		❖ Electric Potential – Electrodynamics ❖ Electric Circuits ❖ Electric Power • Magnetism – Electromagnetism ❖ Electromagnetic Induction - Electromechanical Device (transformer)			
اسئلة عامة ومناقشة بالاضافة الى جعل الطالب يطبق العملي	نظري + عملي	• Mechanics – Velocity - Accelartion		نظري 2 عملي 3	الثالث
امتحان آني بالاضافة الى جعل الطالب يطبق العملي	نظري + عملي	- Newton's Laws of Motion - Gravitational field - Weight - Friction - force and acceleration		نظري 2 عملي 3	الرابع
امتحان تطبيق عملي	نظري + عملي	– Momentum – Impulse – Impulse and Collisions – Impulse-momentum relation - Law of conservation of momentum		نظري 2 عملي 3	الخامس
اسئلة عامة ومناقشة	نظري + عملي	- Work - Energy - Types of energy - Energy Conservation		نظري 2 عملي 3	السادس
اسئلة عامة امتحان اني بالاضافة الى جعل الطالب يطبق العملي	نظري + عملي	– Work-energy relation – Power – Conservative and neoconservative forces - Gravitational potential energy		نظري 2 عملي 3	السابع
واجبات جماعية	نظري + عملي	• Periodic Motion - Simple harmonic motion: springmass system, simple pendulum, physical pendulum		نظري 2 عملي 3	الثامن
اسئلة عامة ومناقشة	نظري + عملي	• Dynamics of Rotational Motion – Moment of inertia – Angular position, angular velocity, angular acceleration		نظري 2 عملي 3	ش

		Torque			
امتحان	نظري + عملي	- Torque-angular acceleration relation - Static equilibrium - Rotational kinematics Work done by a torque		نظري 2 عملي 3	العاشر
اسئلة عامة ومناقشة بالاضافة الى نارات تخص الموضوع للمناقشة بين الطلبة	نظري + عملي	- Rotational kinetic energy - Angular momentum - Static equilibrium experiments Rotational motion problem		نظري 2 عملي 3	الحادي عشر
اسئلة عامة ومناقشة بالاضافة الى نارات تخص الموضوع للمناقشة بين الطلبة	نظري + عملي	- Damped and Driven oscillation Periodic Motion experimen		نظري 2 عملي 3	الثاني عشر
اسئلة عامة وامتحان آني	نظري + عملي	- Gravitational potential energy Escape velocity		نظري 2 عملي 3	الثالث عشر
واجبات جماعية بالاضافة الى نارات تخص الموضوع للمناقشة الطلبة وتطبيق عملي	نظري + عملي	Heat, temperature - Latent heat - Specific Heat - Methods of heat transfer		نظري 2 عملي 3	الرابع عشر
اسئلة الامتحان	نظري + عملي	• Gases, • Pressure & volume, laws of pressure.		نظري 2 عملي 3	الخامس عشر

11. تقييم المقرر

توزيع الدرجة من 100 على وفق المهام المكلف بها الطالب مثل التحضير اليومي والامتحانات اليومية والشفوية والشهرية والتحريرية والتقارير.... الخ

12. مصادر التعلم والتدريس

لا يوجد	الكتب المقررة المطلوبة (المنهجية أن وجدت)
	المراجع الرئيسة (المصادر)
	الكتب والمراجع الساندة التي يوصى بها (المجلات العلمية، التقارير....)
	المراجع الإلكترونية ، مواقع الانترنت

Course Description Form

13.Course Name:					
General physics					
14.Course Code:					
15.Semester / Year:					
First semester					
16.Description Preparation Date:					
20/6/2026					
17.Available Attendance Forms:					
18.Number of Credit Hours (Total) / Number of Units (Total)					
5 hours, 3 units					
19.Course administrator's name (mention all, if more than one name)					
20.Course Objectives					
Course Objectives	1. Learn the standard units of measurements. 2. Define the Electricity & Magnetism. 3. Know the Gravitation and Kinetic Energy. 4. Define the Work-energy relation. 5. Know the Conservative and neoconservative forces. 6. Define Momentum, Impulse and Collisions. 7. Define Periodic Motion. 8. State and explain the Dynamics of Rotational Motion. 9. Define the heat and pressure.				
21.Teaching and Learning Strategies					
Strategy	Lectures and discussions Brainstorming strategy Community work strategy Strategy for dialogue and exchange of opinions In addition to the quizzes and practical application				
22. Course Structure					
Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	Theoretical 2 Practical 3		• Standard units of measurements – Length – Mass	theoretical and practical	

2	Theoretical 2 Practical 3		• Electricity – Electrostatics ❖ Electrostatic Laws ❖ Electric Potential – Electrodynamics ❖ Electric Circuits ❖ Electric Power • Magnetism – Electromagnetism ❖ Electromagnetic Induction Electromechanical devices (transformer)	theoretical and practical	Some work group sessions, in addition to seminars on the topic for discussion between students and practical application
3	Theoretical 2 Practical 3		• Mechanics – Velocity – Acceleration	theoretical and practical	Some work group sessions, in addition to seminars on the topic for discussion between students and practical application
4	Theoretical 2 Practical 3		- Newton's Laws of Motion Gravitational field Weight Friction force and acceleration	theoretical and practical	Some work group sessions, in addition to seminars on the topic for discussion between students and practical application

5	Theoretical 2 Practical 3		– Momentum – Impulse – Impulse and Collisions – Impulse-momentum relation Law of conservation of momentum	theoretical and practical	Some work group sessions, in addition to seminars on the topic for discussion between students and practical application
6	Theoretical 2 Practical 3		- Work - Energy - Types of energy - Energy Conservation	theoretical and practical	Some work group sessions, in addition to seminars on the topic for discussion between students and practical application
7	Theoretical 2 Practical 3		– Work-energy relation – Power – Conservative and non-conservative forces Gravitational potential energy	theoretical and practical	Some work group sessions, in addition to seminars on the topic for discussion between students and practical application
8	Theoretical 2 Practical 3		• Periodic Motion Simple harmonic motion: spring-mass system, simple pendulum, physical pendulum		Some work group sessions, in addition to seminars on the topic for discussion between students and practical application
9	Theoretical 2 Practical 3		• Dynamics of Rotational Motion – Moment of inertia – Angular	theoretical and practical	Some work group sessions, in addition to seminars on the topic for discussion between students and

			position, angular velocity, angular accelerat ion Torque		practical application
10	Theoretical 2 Practical 3		– Torque-angular acceleration relation – Static equilibrium – Rotational kinematics Work done by a torque		ome work roup sessions, in addition to seminars on the topic for discussion between students and practical application
11	Theoretical 2 Practical 3		– Rotational kinetic energy – Angular momentum – Static equilibrium experiments Rotational motion problems	theoretical and practical	ome work roup sessions, in addition to seminars on the topic for discussion between students and practical application
12	Theoretical 2 Practical 3		– Damped and Driven oscillation Periodic Motion experiment	theoretical and practical	ome work roup sessions, in addition to seminars on the topic for discussion between students and practical application
13	Theoretical 2 Practical 3		– Gravitational potential energy Escape velocity	theoretical and practical	ome work roup sessions, in addition to seminars on the topic for discussion between students and practical application

14	Theoretical 2 Practical 3		heat, temperature Latent heat Specific Heat Methods of heat transferring	theoretical and practical	home work group sessions, in addition seminars on the topic for discussion between students and practical application
15	Theoretical 2 Practical 3		• Gases, • Pressure & volume, laws of pressure.	theoretical and practical	exam
23.					
24.					