مختصر توصيف المقرر

(Course Information)

معلومات المقرر*

	اسم المقرر:			
	فيز 1012	رقم المقرر:		
		اسم ورقم المتطلب السابق:		
		اسم ورقم المتطلب المرافق:		
	الأول	مستوى المقرر:		
	(0+2+0) 1	الساعات المعتمدة:		
Module Title:	General Physics I Lab.	General Physics I Lab.		
Module ID:	PHYS 1012	PHYS 1012		
Prerequisite:				
Co-requisite:				
Course Level:	First	First		
Credit Hours:	1 (0+2+0)	1 (0+2+0)		

وصف المقرر:

Description

This course is the experimental part of the introductory course for the fundamental principles of physics in mechanics. The student will do experiments related to the theoretical phenomenon of: One and two dimensions, circular motions, collisions, linear and angular momentum, and elasticity.

أهداف المقرر:

1	Knowing and practicing the ethics of working in the laboratory.		
2	The ability of using the measuring tools correctly	2	
3	The student should be able to do the experiment by himself, and to collect data.	3	
4	The ability to analyze data and write conclusions.	4	

Learning Outcomes: مخرجات التعليم:

1	Knowledge	1
2	Cognitive Skills	2
	To experimentally distinguish between the one and two-dimensional mechanics	
	To analyze the schematics and diagrams related to it.	
	To explain and justify the results obtained from the experiment	

3	Interpersonal Skills & Responsibility	3
	Practice the safety and organizing rules of the laboratories.	
	• To act with self-reliance when working independently. Displays teamwork and shows professional commitment to ethical practice.	
4	Communication, Information Technology and Numerical Skills	4
	To write laboratory reports, relate experiments to its related theories.	
	• To use software programs in writing, inserting and analyzing data, and plotting graphs.	
	To develop the ability to argue scientifically with the instructor.	
	• To know how to use the computer program to analyze the data, and make some simulation	
	• To know how to search the web for any updated information concerning the assigned experiment.	
	To analyze the data with good mathematics and theory.	
5	Psychomotor	5
	Not applicable.	

Course Contents: محتوى المقرر:

ساعات التدريس	عدد الأسابيع	قائمة الموضوعات	
(Hours)	(Weeks)	(Subjects)	
2	1.0	Lab. Orientation and instructions.	
2	1.0	Measurements experiment	
2	1.0	Equation of motion experiment	
2	1.0	Vector table experiment	
2	1.0	Projectile motion experiment	
2	1.0	Free fall experiment	
2	1.0	Friction experiment	
2	1.0	Simple pendulum experiment	
2	1.0	Hook's law experiment	
2	1.0	Inclined plane experiment	
2	1.0	Rotational motion experiment	
2	1.0	Collision and momentum	
2	1.0	Oral Exam	
2	1.0	Practical Exam	

Textbook and References:

الكتاب المقرر والمراجع المساندة:

سنة النشر	اسم الناشر	اسم المؤلف (رئيسي)	اسم الكتاب المقرر
Publishing Year	Publisher	Author's Name	Textbook title
		Prepared By Samir Al-Zobaidi	Lab. Manuals
سنة النشر	اسم الناشر	اسم المؤلف (رئيسي)	اسم المرجع
Publishing Year	Publisher	Author's Name	Reference

9 th Ed. (2011)	Cengage Learning	Raymond A. Serway, Chris Vuille	College Physics <i>ISBN</i> -10:0840062060
9 th Ed. (2012)	John Wiley & Sons	John D. Cutnell, <u>Kenneth W.</u> <u>Johnson</u>	Physics <i>ISBN</i> -10: 0470879521
9 th Ed. (2013)	Cengage Learning	Raymond A. Serway and <u>John W.</u> <u>Jewett</u>	Physics for scientists and engineers ISBN-10: 013805715X