



**Jordan University of Science and Technology**  
**Faculty of Science & Arts**  
**Physics Department**

PHY211 Properties Of Matter And Heat

First Semester 2017-2018

**Course Catalog**

2 Credit Hours. يغطي هذا المساق مواضيع مكملة في الفيزياء العامة مثل خواص المادة والجاذبية والموائع والحرارة والنظرية الحركية للغازات والتيار المتردد والمحاثة.

**Instructor**

Name	<b>Prof. Akram Rousan</b>
Office Location	PH3 L1
Office Hours	Sun : 08:30 - 10:30 Mon : 09:00 - 11:00 Tue : 11:30 - 12:30 Wed : 11:30 - 12:30 Thu : 13:30 - 14:30
Email	akram@just.edu.jo

**Class Schedule & Room**

Section 1:  
Lecture Time: Sun, Tue : 12:30 - 13:30  
Room: NF27

**Prerequisites**

Line Number	Course Name	Prerequisite Type
921020	PHY102 General Physics (2)	Prerequisite / Study

**Tentative List of Topics Covered**

Weeks	Topic	References
Weeks 1, 2	Elasticity; Elastic properties of solids	
Weeks 3, 4, 5	The Law of Gravity	

Weeks 6, 7, 8	Fluid Mechanics	
Weeks 9, 10	Temperature	
Weeks 11, 12	Heat and the First Law of Thermodynamics	
Week 13	The Kinetic Theory of Gases	
Weeks 14, 15	Inductance and Alternating Current Circuits	

Mapping of Course Objectives to Program Student Outcomes <sup>1</sup>	Assessment method
2) Understanding and solving elasticity and gravity [1(a), 1(e), 1(i)]	first exam
3) Understanding and solving problems fluid mechanics [1(a), 1(e)]	first exam
4) Understanding and solving problems in temperature and heat [1(a), 1(e)]	
5) Understanding and solving problems kinetic theory of gases [1(a), 1(e)]	
6) Understanding and solving problems in AC circuit theory [1(a), 1(e)]	

Relationship to Program Student Outcomes (Out of 100%)										
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)
36.67				36.67				6.67		

Evaluation	
Assessment Tool	Weight
first exam	30%

Date Printed: 2017-11-28