



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

PHY106 General Physics (Laboratory)(2)

Summer Semester 2019-2020

Course Catalog

1 Credit Hours. This laboratory has 10 experiments that emphasize the experimental techniques and procedures in writing formal reports. These experiments reinforce and extend the work of the lectures of physics course Phys. 102. The experiments emphasize on general topics electricity and magnetism as shown in details in the table below.

Text Book

Title	General Physics Laboratory Manual II 106
Author(s)	Department of Physical Sciences
Edition	1st Edition
Short Name	Ref. 1
Other Information	

Course References

Short name	Book name	Author(s)	Edition	Other Information
Ref. 2	Physics for Scientists and Engineers	Serway and Jewett	9th Edition	

Instructor

Name	Mr. Shadi El-Samarah
Office Location	-
Office Hours	
Email	saelsamarah@just.edu.jo

Class Schedule & Room

Section 2:

Lecture Time: Thu : 12:30 - 16:30

Room: LAB2 PH3 L0

Prerequisites

Line Number	Course Name	Prerequisite Type
921052	PHY105 General Physics Lab (1)	Prerequisite / Pass
921020	PHY102 General Physics (2)	Pre./Con.

Tentative List of Topics Covered

Weeks	Topic	References
Week 1	Ohm's Law	From Ref. 1
Week 2	Galvanometer	From Ref. 1
Week 3	Potentiometer	From Ref. 1
Week 4	Wheatstone Bridge for Resistors	From Ref. 1
Week 5	Wheatstone Bridge for Capacitors	From Ref. 1
Week 6	Impedance Matching for Maximum Power Transfer	From Ref. 1
Week 7	RC Circuits	From Ref. 1
Week 8	Measurement of Earth's Magnetic Field	From Ref. 1
Week 9	Permeability of air	From Ref. 1
Week 10	Supplementary Experiment	From Ref. 1
Week 11	Final Exam.	From Ref. 1

Mapping of Course Outcomes to Program Student Outcomes	Course Outcome Weight (Out of 100%)	Assessment method
Strengthen the students understanding of the basic physical concepts electricity and magnetism [21, 33, 14]	15%	
Develop the students' skills in collecting and analyzing the data and formulating meaningful conclusions based on this data [21, 33, 14]	30%	
Describe and calculate uncertainty of the measured values [21, 33, 14]	10%	
Enhance ability of students to communicate results and ideas through writing scientific reports and drawing figures [21, 33, 14]	30%	
Practice students skills at working cooperatively within a group to achieve solutions to given problems [21, 33, 14]	15%	

Relationship to Program Student Outcomes (Out of 100%)					
1	2	3	4	5	6
33.33		50	16.67		

Evaluation	
Assessment Tool	Weight
Reports	40%
Quizes	20%
Final Exam (Practical)	20%
Final Exam (written)	20%

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