



Course Outline of General physics 2 laboratory 402104

1. Instructor's Information

Instructor's / Coordinator's Name:	Ala Lutfi Almoumani
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Research and Teaching Assistant / Supervisor / Technical (if any):	NA

2. Course Description,

In this lab students will perform experiments in physical topics (electricity and magnetism) that enhance the theoretical understanding of the principles learned in General physics (2): Electric field, Ohms law, Electric power, Voltage divider, Kirchhoff's laws, Constructing Ammeter using Galvanometer, Capacitors, Magnetic field, Magnetic induction.

3. Course Information

Course No.: 402104	General physics 2 laboratory	Level: 2 nd year
Course Type: Practical	Prerequisite/co-requisite:402102	Class Time:2-5
Academic Year:2020/2021	Semester: First	Study hours:3 hrs

4. Course Objectives:

1	Able to handle experiments related to the properties of electricity and magnetism.
2	Enhance the theoretical understanding of physical topics related to electricity and magnetism.
3	Set up and use laboratory equipment to demonstrate certain aspects of physical phenomena.
4	Acquire the skills of data analysis and draw conclusions.

5. Learning Outcomes

1	Learn how to construct physical experiment using available lab instruments.
2	Observe some physical phenomena practically.
3	Identify the practical side of the theoretical physical electricity and magnetism.
4	Describe observations, discuss and analyzing the data.
5	Formulate conclusions that support and promote theoretical understanding of electricity and magnetism.
6	Training how to write lab report that describe the experiment and the results.

6. Course Content

Week	Subject
2	Electric field lines
3	Ohm's Law
4	Wheatstone Bridge
5	Electric power
6	Potentiometer
7	Kirchhoff's Law
8	Make ammeter using galvanometer
9	Charge and discharge circuit of capacitor
10	Magnetic field of electric current
11	Faraday's law of magnetic induction
	Final Exam

8. Assessment

Methods Used	Assessment Time	Distribution of grades
1- semester work (report, assignments, attendance)	During semester	45%
2- Quiz	Week: 2-11	15%
4- Final Exam	Week of the final exams	40%

Textbook and Supporting Material:

- 1- Laboratory manual plus any scientific references that assist the student in reviewing and understanding the theoretical side of the experiment.