

Mutah University

Faculty of Science

Physics Department



جامعة مؤتة

كلية العلوم

قسم الفيزياء

General Physics Lab (2) Syllabus

Course Code	Course Name	Credits	Contact Hours
0302112	General Physics Lab (2)	1	48

INSTRUCTOR/COORDINATOR

Name	Dr. Emad Jaradat
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TEXTBOOK

- Physics for Scientists and Engineers, Serway and Jewett, 9th edition.
- Practical physics, G. L. Squires, University of Cambridge, 4th edition.

SPECIFIC COURSE INFORMATION

A. Brief Description of the Content of the Course (Catalog Description)

General physics laboratory provides students to apply the concepts and physical laws that are introduced in lectures related to physics I and physics II. The students will be provided with video links to watch the theory part before coming to the lab, due to the lab's time had been reduced to two hours. Each class will have a short discussing about the theory part, the concepts and any formulas of the main topic for the experiment. The lecture will also cover any expected problems in the lab-report. All the experiments will be performed in groups. Note: each student needs to turn in an individual lab report.

B. Pre-requisites (P) or Co-requisites (C)

0302102 General Chemistry (1)

C. Course Type (Required or Elective)

Required (Compulsory Faculty course)

SPECIFIC GOALS

A. Specific Outcomes of Instruction

Students will gain the ability to:

1. Apply different procedures and techniques for each experiment [SLO 6]
2. Learn about the various measuring devices to record the data [SLO 6]
3. Apply equations related to physical laws to get quantitative results [SLO 6]
4. Improve students' communication skills [SLO 3]
5. Work effectively as a part of a team. [SLO 5]

B. Student Outcomes Addressed by the Course

1	2	3	4	5	6	7
		✓		✓	✓	

BRIEF LIST OF TOPICS TO BE COVERED

List of Topics	No. of Weeks	Contact Hours
Introduction	1	3 hours
Electric field mapping	1	3 hours
Specific charge of Copper ion	1	3 hours
Capacitors	1	3 hours
Ohm's law	1	3 hours
The potentiometer	1	3 hours
The Whetstone bridge	1	3 hours
Power transfer	1	3 hours
The conductor balance	1	3 hours
The magnetic field of a current	1	3 hours
Construction of Ammeter and Voltmeter	1	3 hours
Final Exam	1	3 hours
Total	16	48 hours

METHODS OF ASSESSMENT

No.	Method of assessment	Week and Date	%
1	First Mid-term exam	8 th week	20
2	Reports, Homework, Quizzes, Attendance	During the Semester	40
4	Final Examination	Final Week	40
	Total		100