QF01/0408-4.0E	Course Plan for Bachelor program - Study Plan Development and Updating Procedures/ physics Department

Study plan No.	2021/2022		**University Specialization**		Bachelor of physics		
Course No.	0150102		**Course name**		General Physics Lab 2		
Credit Hours	1		**Prerequisite/ Co-requisite**		None		
Course type	☐ MANDATORY UNIVERSITY REQUIREMENT	☐ UNIVERSITY ELECTIVE REQUIREMENTS	☐ FACULTY MANDATORY REQUIREMENT	☐ Support course family requirements	✓ **Mandatory requirements**	☐ Elective requirements	
Teaching style	☐ Full online learning		Blended learning		✓ **Traditional learning**		
Teaching model	☐ 1 Synchronous: 1 asynchronous		2 face to face : 1 asynchronous		✓ **2 Traditional**		

Faculty member and study divisions' information (to be filled in each semester by the subject instructor)

Name	Academic rank	Office No.	Phone No.	E-mail	
Dr. Bashar S. Aljawarneh	Assistant Professor	129	429	BasharAljawarneh@gmail.com B. Aljawarneh @zuj.edu.jo	
Division number	**Time**	**Place**	**Number of students**	**Teaching style**	**Approved model**
1	[08:00 – 11:00] M	9143	4	Blended learning	2:1

Brief description

Charge and matter. Electric field. Gauss law. Electric potential. Capacitors and dielectrics. Electromotive force and electric circuits. Magnetic field. Ampere's law. Faraday's law of induction. Self-induction.

Learning resources

Course book information (Title, author, date of issue, publisher ... etc)	Laboratory Experiment Physics (II)			
Supportive learning resources (Books, databases, periodicals, software, applications, others)	1. Fundamental of Physics, by Haliday & Resnik 2015 2. University Physics, by Sears & Zemanisky, 2015. 3. Physics for Scientists and Engineers 9th ed. 2015, Serway			
Supporting websites	• https://en.wikipedia.org/wiki/Physics • https://ocw.mit.edu/courses/physics			
The physical environment for teaching	✓ Class room	✓ labs	Virtual educational platform	Others
Necessary equipment and software				
Supporting people with special needs				
For technical support				

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Course learning outcomes (S= *Skills, C= Competences K= Knowledge,)*

No.	Course learning outcomes	The associated program learning output code
	Knowledge	
K1	**Define** the physical quantities, physical phenomena, and basic principles of physics related to the course	MK 1
K2	**Record** the physical quantity at the lab.	MK 2
	Skills	
S1	**Calculate** the physical quantities, and basic principles of physics related to the course.	MS 1
S2	**Determine** some physical quantities at the lab	MS 3
	Competences	
C1	**Cooperate** to work effectively in the group assignments.	MC 1

Mechanisms for direct evaluation of learning outcomes

Type of assessment / learning style	Fully electronic learning	Blended learning	Traditional Learning (Theory Learning)	Traditional Learning (Practical Learning)
Midterm exam	30%	30%	40%	**20%**
Participation / practical applications	0	0	10%	**30%**
Asynchronous interactive activities	30%	20%	0	**0**
Final exam	40%	50%	50%	**50%**

Schedule of simultaneous / face-to-face encounters and their topics

Week	Subject	learning style*	Reference **
1	**1**	CASSY LAB	Sheet
2	**1**	Recording Equipotential Lines & El. Fields Lines Mapping.	1 – 5
3	**1**	Ohm's Law	6 – 11
4	**1**	Wheatstone bridge	12 – 15
5	**1**	The Galvanometer, Ammeter & Voltmeter	16 – 21
6	**1**	Kirchhoff's Rules	22 – 25
7		**Med term exam**	
8	**1**	Voltage Division with a Potentiometer	26 – 32
9	**1**	Electrical Power	33 – 36
10	**1**	Measurement of a Capacitance	37 – 41
11	**1**	RC-Circuits	42 – 47
12	**1**	Electromagnetic Induction and Faraday's Law	48 – 53
13	**Review and Final Exam**		

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