

Al Mustaqbal University College



EXPERIMENT NO:	3	
TUTOR NAME:	Dr. Ameer Al-khaykan, Safaa Aboud Kadhim, Huda Rahim	
PROGRAMME:	Electrical Circuit	
SUBJECT:	Electrical Circuit lab	
COURSEWORK TITLE:	Ohm's Law	

3.1. Objects:

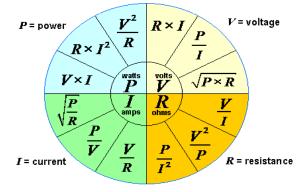
• To get familiar with Ohm's law implementation in electric circuits, moreover, voltage-current measurements, network reduction, transformation and power supplied and consumed calculations are among other electrical engineering principles a student should a quire.

3.2. Apparatus:

- Resistors (different ratings)
- (D.C) power supply
- Measuring instruments (voltmeter, ammeter and ohmmeter)
- Connecting wires and board.

3.3. Theory :

In 1826 George Ohm published a paper, in which his measurements of electricity were summarized in a simple relation between current and voltage, using a constant that we call the resistance of the circuit.



This figure shows Ohm's Laws:

		$I_{100\Omega}$
E(volts)	Current	+ R1
	(mA)	
0		
2		
4		
6		$\mathbb{R}_{2} \ge 500\Omega$
8		
10		

R2 (Ω)	Current (mA)	$I_{+} R1=100\Omega$
100 200		$= 10\overline{v_{-}}$
300 400 500		R2 × 100-500Ω

