EXPERIMENT 1
INTRODUCTION TO THE LABORATORY

1.1 Objective:

In this experiment, you will learn the basic usage of the laboratory equipments (digital storage oscilloscope (DSO), Signal Genarator, DC Power Supply, Beradboard, Multimeter). More specifically you will learn,

1. Resistor color codes and Resistor measurement via multimeter
2. Usage of breadboard and building up circuits on it.
3. Usage of multimeter as voltmeter and ampermeter.
4. Usage of signal generator.
5. Usage of power supply.
6. Usage of other laboratory tools and laboratory rules

1.2 Equipment List:

1. Breadboard
2. Digital Storage Oscilloscope (GW Instek GDS-1072A-U)
3. Function/Arbitrary Waveform Generator (AATech AWG 1020A)
4. Power supply
5. Digital Multimeter
6. Carbon Resistors

1.3 Preliminary Work:

1. Read the "*Voltage and current measurement*" document.
2. Read the "*Oscilloscope notes*" document.
3. Read the "*Notes on Oscilloscopes*" document.
4. Read the "*Notes on function generator*" document.
5. Read the "*How to prepare report*" document.

These documents can be found @personal webpage of the course insturcor
https://akademik.adu.edu.tr/fakulte/muhendislik/personel/yilmaz.kalkan/dersler

1.4 Experimental Procedures

This is a introductory lecture to introduce laboratory equipments. All information will be supplemented to the students by instructor at the lab. Session. The students have to come to the laboratory prepared well by completing the reading assignments given in preliminary work part above for an effective lab. session. After the lab session, each group has to prepare a detailed report on the

use of laboratory devices. This will be good preperation for the next experiments. Lab. Reports have to be prepared using “EE209_Report_template.docx” file supplied @ personal webpage of the course insturcor given above and signed by students.