

# Lab 0: Equipment

Submit Assignment

---

<b>Due</b>	Wednesday by 1:30pm	<b>Points</b>	100	<b>Submitting</b>	a file upload	<b>File Types</b>	pdf
------------	---------------------	---------------	-----	-------------------	---------------	-------------------	-----

---

Create a pdf document answering the questions in the following:

[MEAM510 21A Lab0-2.pdf](#)  which references this document:

[OscilloSorta V0.3 Tutorial.pdf](#) 

Submit a single document through canvas file upload for this assignment.

Note your document must be a single PDF. There will be a 15% penalty for not following this format.

---

**Lab 0 Rubric**

Criteria	Ratings			Pts
0.1.1	<b>4 pts</b> <b>2 consequences</b>	<b>2 pts</b> <b>1 consequence</b>	<b>0 pts</b> <b>No Marks</b>	4 pts
0.1.2	<b>4 pts</b> <b>Full list of DMM capabilities</b>		<b>0 pts</b> <b>No Marks</b>	4 pts
0.1.3	<b>3 pts</b> <b>Answer with explanation</b>		<b>0 pts</b> <b>No Marks</b>	3 pts
0.1.4	<b>4 pts</b> <b>2 connected things</b>	<b>2 pts</b> <b>1 connected thing</b>	<b>0 pts</b> <b>No Marks</b>	4 pts
0.3.1	<b>12 pts</b> <b>Full Marks</b> A list of a couple resistors, and combinations of resistors in series and parallel. Calculations for whether measured resistances are within tolerance. Description and explanation of the experiment touching the metal to change the measured resistance.			<b>0 pts</b> <b>No Marks</b> 12 pts
0.3.2	<b>12 pts</b> <b>Full Marks</b> List of measurements at different points of voltage divider, paired with calculations of expected voltage. Calculations for expected current.			<b>0 pts</b> <b>No Marks</b> 12 pts
0.4.1	<b>16 pts</b> <b>Full Marks</b> Picture shows 2 to 4 waves on screen, not cut off at top or bottom. Waves are in the correct frequency range.			<b>0 pts</b> <b>No Marks</b> 16 pts
0.4.2	<b>10 pts</b> <b>Full Marks</b> Picture showing channel 2 selected, and some sort of signal/noise from disconnected channel 2 with an explanation of what it is.			<b>0 pts</b> <b>No Marks</b> 10 pts

Criteria	Ratings		Pts
0.4.3	<b>10 pts</b> <b>Full Marks</b> Pictures of aliased >10kHz signal, and picture of logic mode selected with real >10kHz signal	<b>0 pts</b> <b>No Marks</b>	10 pts
0.4.4	<b>25 pts</b> <b>Full Marks</b> Labelled photo of OscilloSorta with voltage divider input that brings 5V signal to within 3.3V range. Image of OscilloSorta scope face showing the output resulting from the voltage divider.	<b>0 pts</b> <b>No Marks</b>	25 pts
Total Points: 100			