

## Lab Syllabus

### Grading:

Prelab	50%
Demonstration during lab session	20%
Post lab	30%

- Students are expected to bring their circuits for each lab session already assembled.
- Measurements and demonstrations must be performed during the lab session individually.
- Lab reports must be individually submitted on Canvas within three days after the lab session.

### Pre-labs:

**Prelab must be submitted as usual before the start of the lab session.**

- A title page with your name, UIN, Lab name, TA name, Date of the lab conducted.
- All schematic screenshots must have their **initials** and the **name of the circuit** written on it.

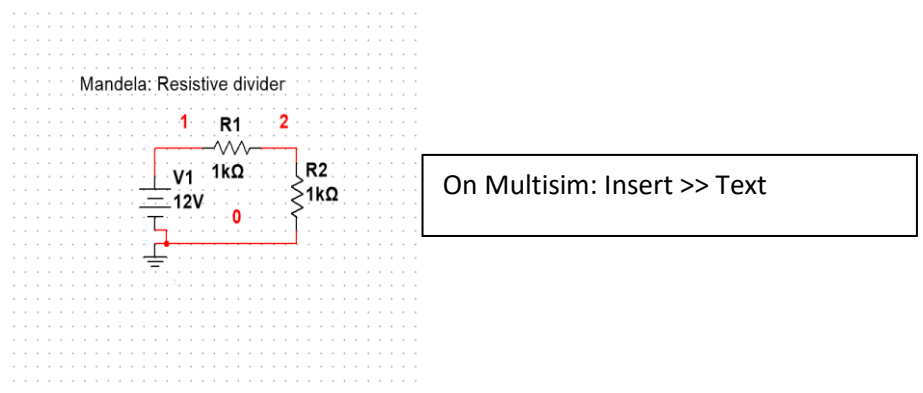


Fig.1. Sample schematic screenshot showing sample initials and name of the circuit

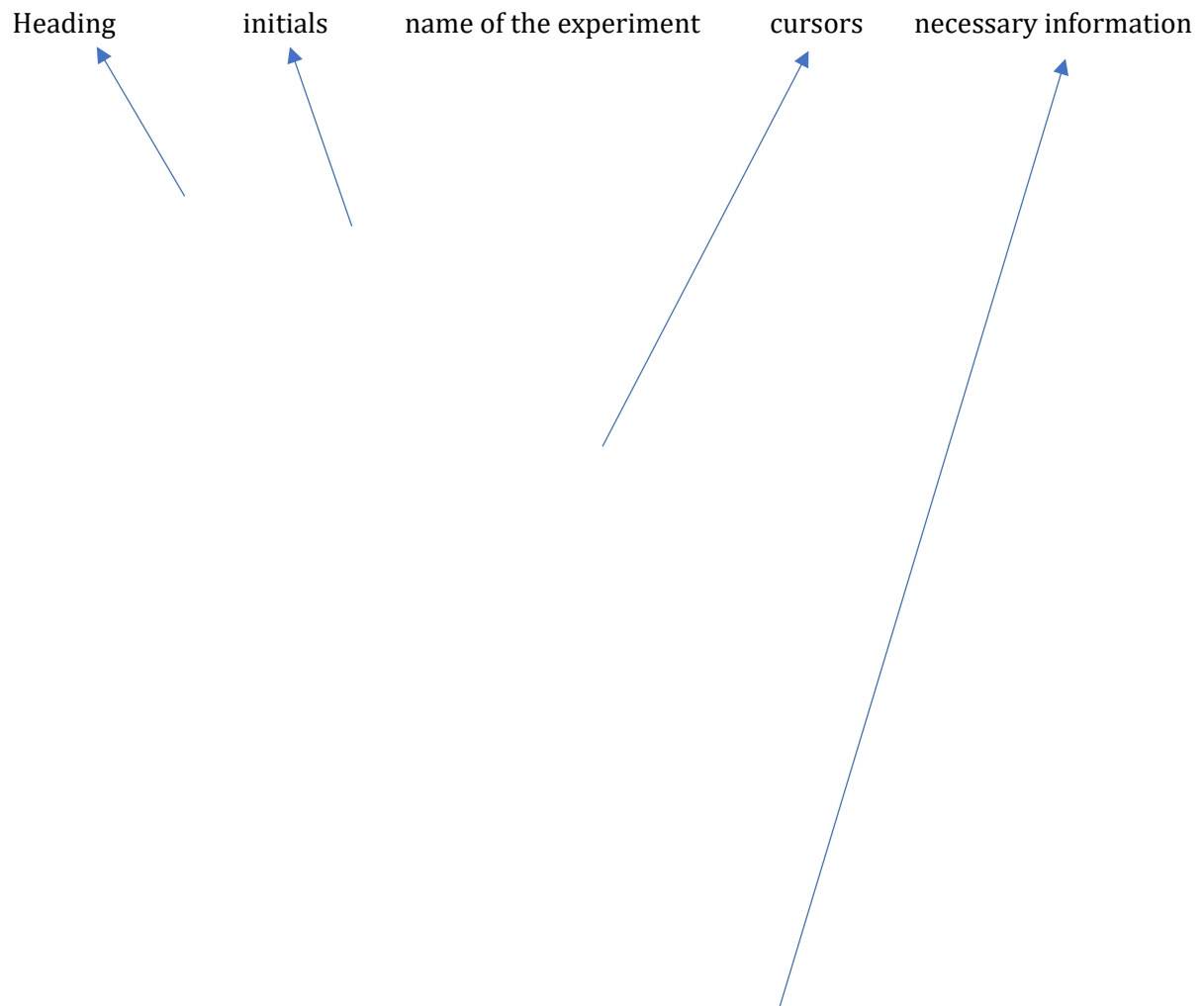
- The calculations page (if scanned) should have your name and UIN written on all of them
- The simulations screenshots **must** include your initials in the title as shown in the Figure.2.:
- The simulations screenshot should also include all the asked information from the prelab:
- Please have the required information written or tabulated under each image. This is to make sure that students are perceiving correct information from the screenshots.
- **Not having your name will result in ZERO points for that segment.**

- **Important:** Please verify that the calculation and simulation results match, else rework on them. This will make your measurements easier.

### Post-lab:

The students are expected to work on calculations, simulations before the lab session, and bring their circuits for each lab session already assembled.

- The TAs will check the time stamp on the screenshots of measurements. Do not exclude it while generating a screenshot.
- Have your name written on each image with right click on the panel >> insert label >> insert initials and information. Or you may use a note pad to have your information written and placed over the image before screenshot.



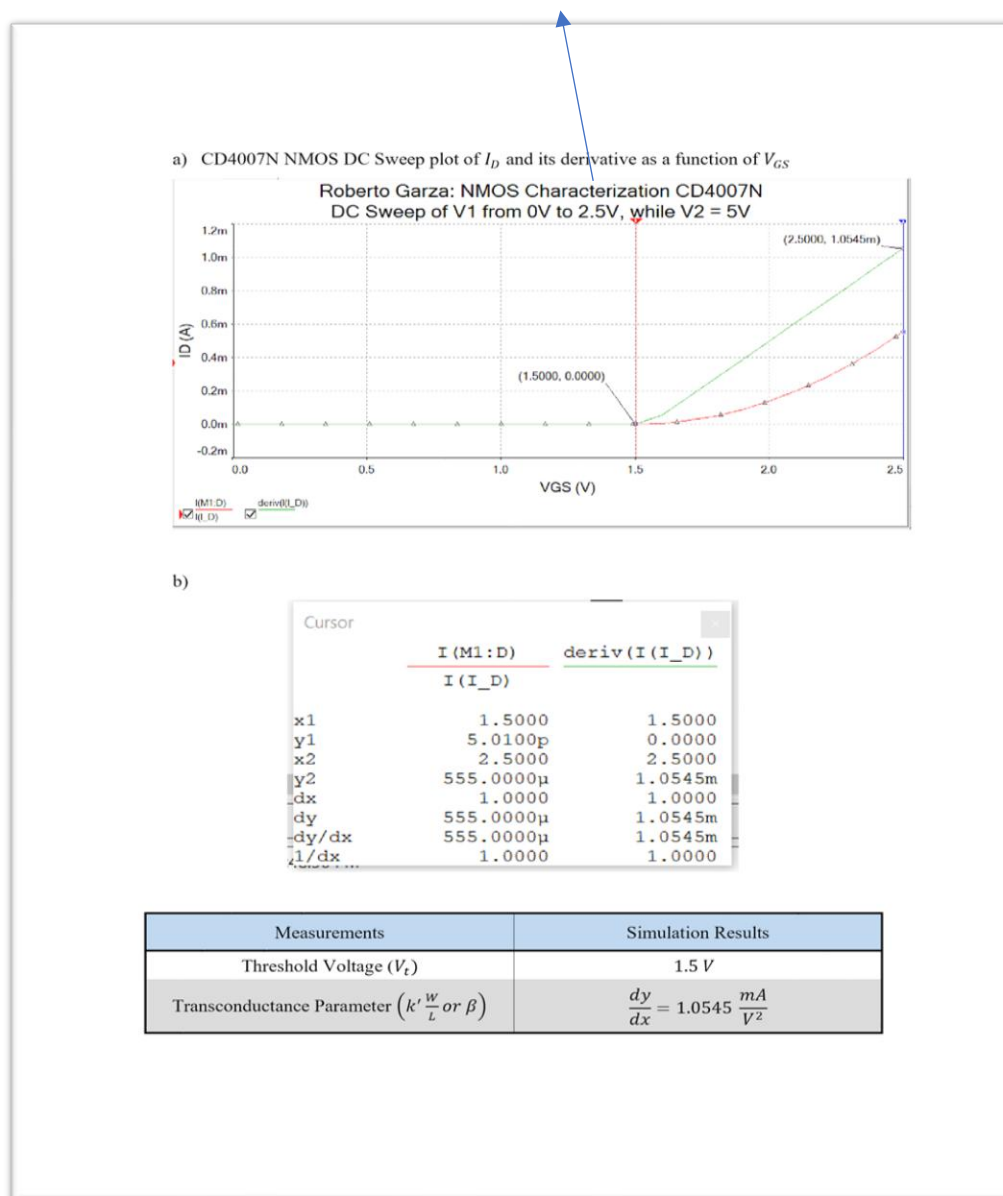
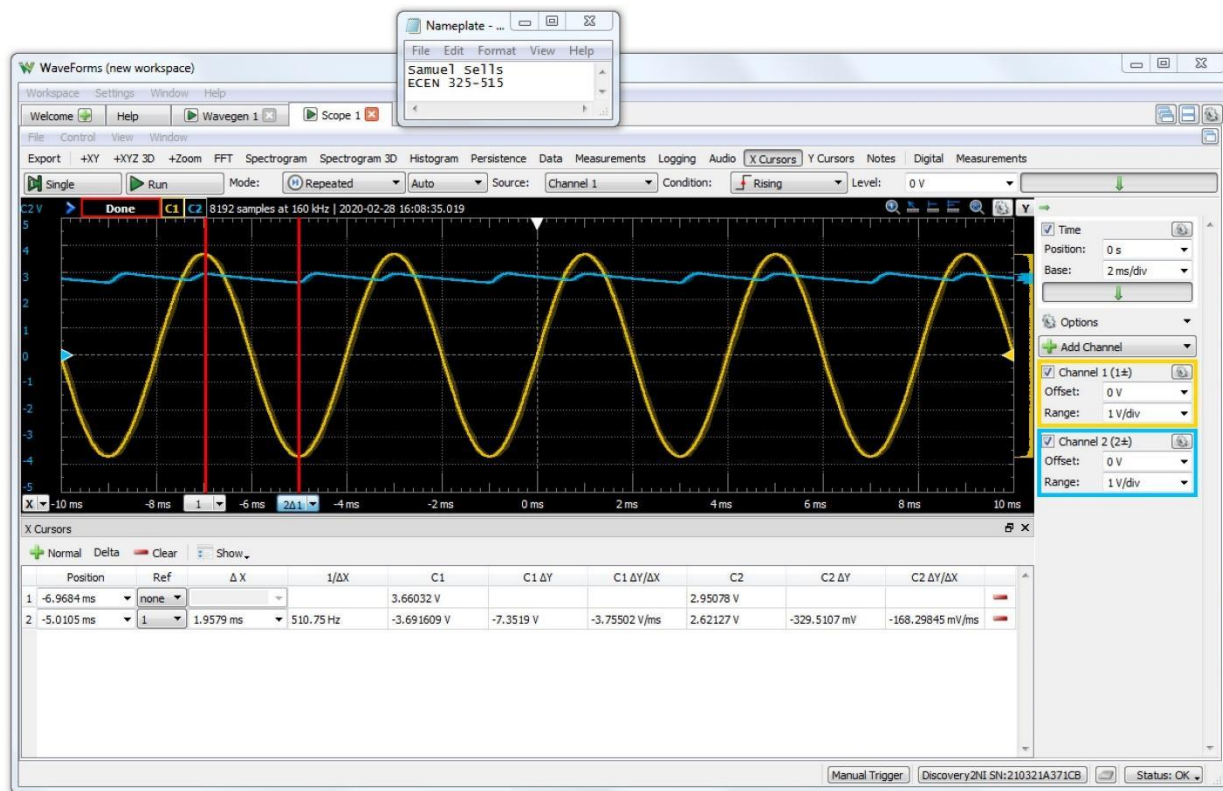


Figure.2. A sample screenshot of simulations showing initials, name of the image, useful information with the cursors, and information collected from the screenshot for the experiment after the image.

- Also, make sure that you write the information asked in the lab manual for each measurement screenshot, under the image itself and include the comparisons with simulations and calculations there itself to avoid making a new comparison table in the end.
- USE APPROPRIATE HEADINGS IN THE REPORT AND TRY TO FOLLOW THE SAME ORDER OF QUESTIONS IN THE REPORT – this will make it easy for the TA to grade the reports.



Measurements	Results	
	Simulated	Measured
Peak Output Voltage	3.702 V	3.586 V
Maximum Ripple $\Delta V$	0.733 V	0.322 V

Figure.3. Sample measurement image with initials, useful information with cursors and necessary information documented and compared with simulated and calculated.

- Make sure to save your session on waveform with all the measurements displayed on the software for each experiment. This will help you retrieve screenshots if you miss any or demonstrate the experiment to the TA outside the lab.
  - Once the experiment concludes and all results are visible on screen, navigate to: File >> Save Project >> Choose an appropriate filename.