

## **ELEN 115 Labs Reports: Content and Format**

Report content – The basic requirement of the lab report is that it must contain sufficient information so that someone else could easily understand and re-create your lab work.

### **Content to include in the report:**

1. The course name, lab # and topic, your name(s), lab section, and the lab date.
2. The lab objective in your own words.
3. Brief description of the procedure for each section of the lab.
4. Circuit schematics of each circuit you construct on LTSpice.
5. Screenshots of all plots and waveforms.
6. Answer all the questions posed in the handout. Most low grades on lab reports can be traced to not answering the questions.
7. The report should end with a few conclusions/lessons learned. Just a few lines are needed but they should provide a summary of what you learned.

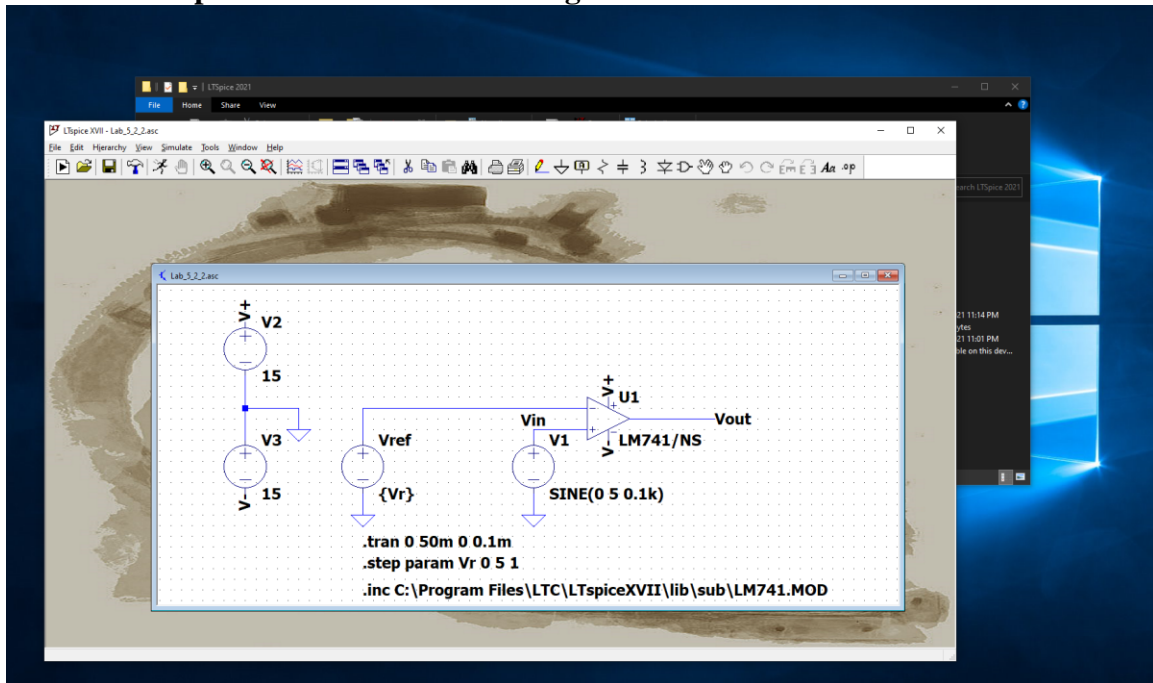
### **Please note:**

- ✓ Number your report sections using the same numbering sequence in the handout.
- ✓ Late reports will not be accepted. You have 1 week from the day of your lab session to submit the report.
- ✓ Label all of your figures and screen shots
- ✓ Please make sure that your screenshots are presented appropriately.
- ✓ There is a document provided that goes through some useful tips for good screenshots from LTSpice.
  1. Include only circuits and/or plots, without extraneous background
  2. Make traces easier to see by setting the plot window to white
  3. How to set the plot window to white

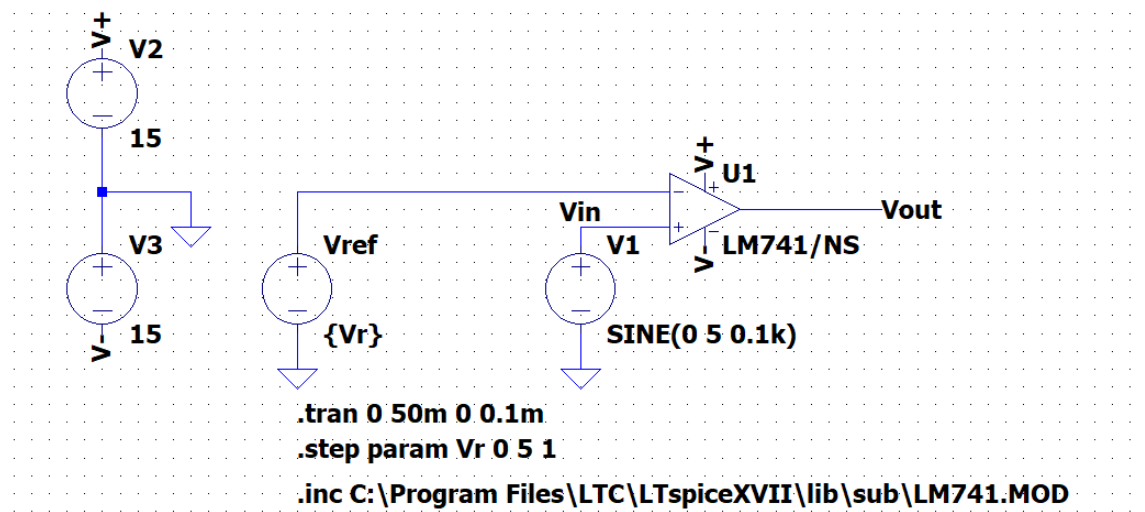
### **How to produce a good screen capture:**

- Snipping tool is probably the easiest way to obtain a screen capture
- Include only the circuit and/or the plot, without including extraneous background on your screen
- Plot window: make traces easier to see by setting plot window background from dark to light
- How to set plot window background to white:
  - Click on the plot window to select it
  - Tools → color preferences
  - In the color palette editor: select background, and set red, green, blue to 255

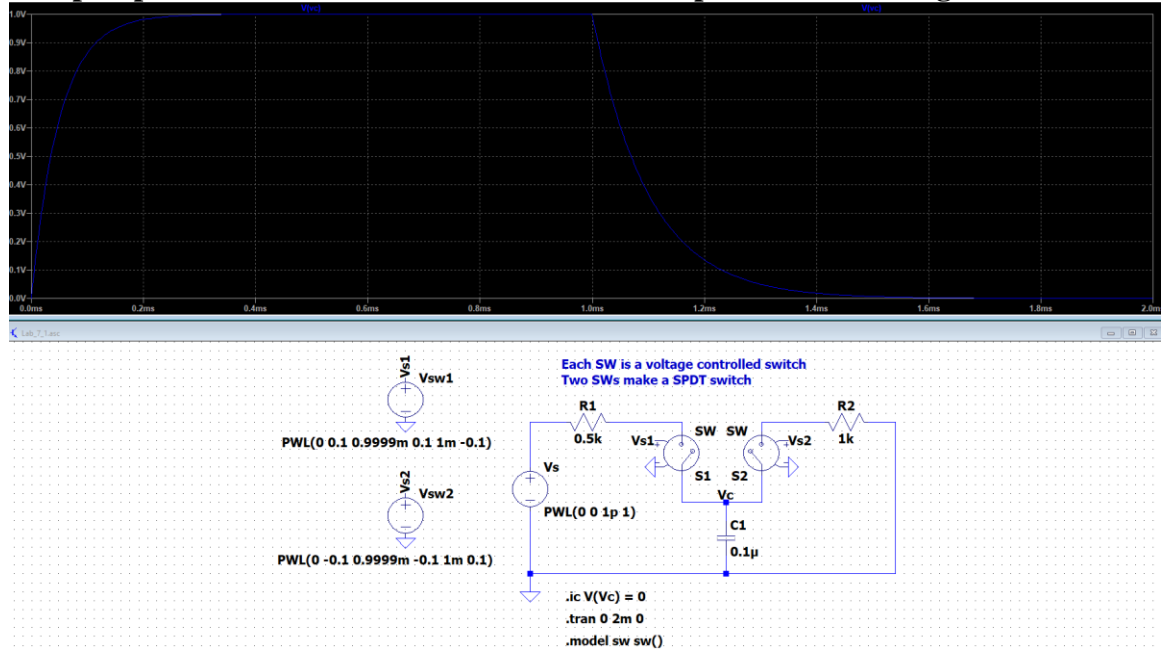
**Bad screen capture: has extraneous background**



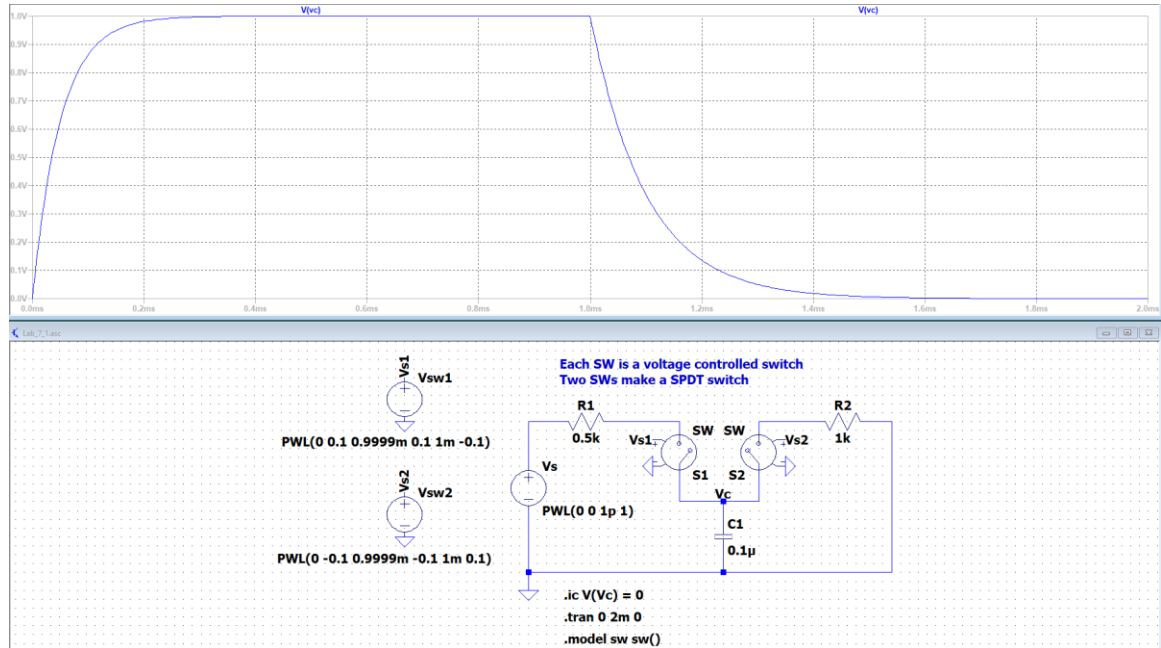
**Good screen capture: shows circuit and/or plot only**



## Bad plot plane: traces are harder to see on a dark plot window background

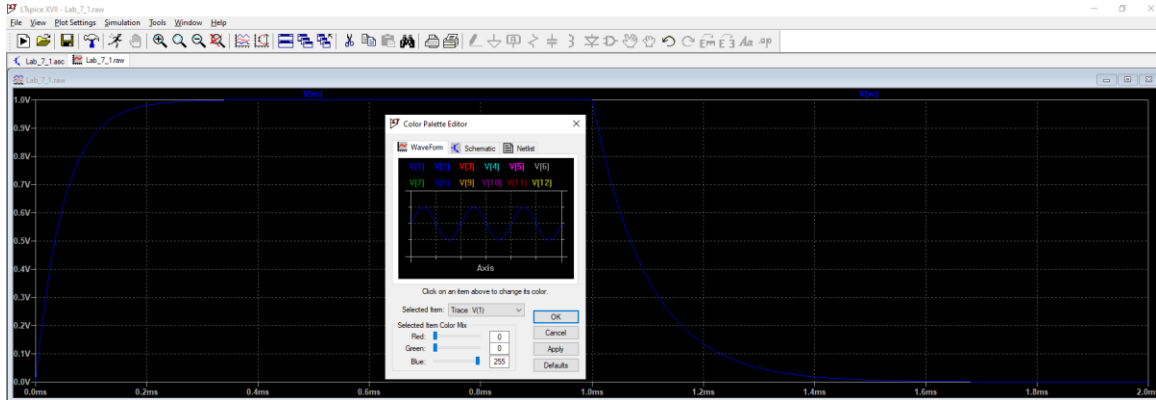


## Good plot plane: traces are easier to see on a light plot window background



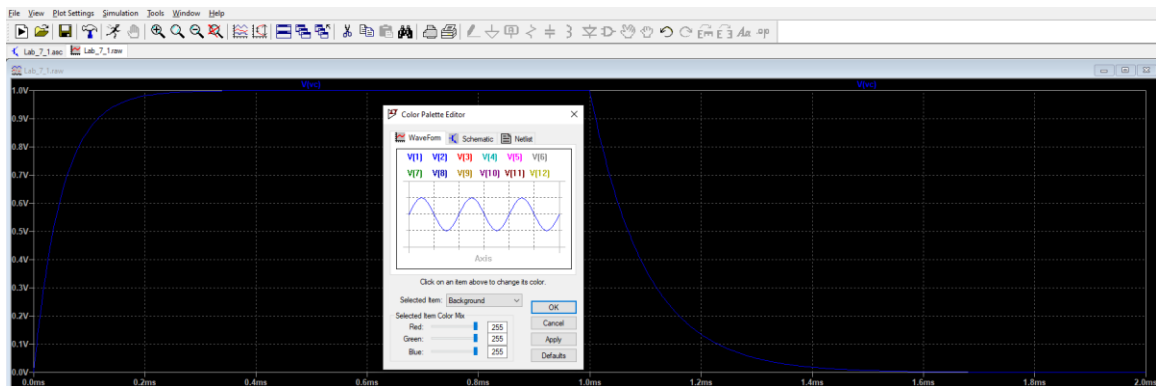
## How to set plot window color to white:

- (1) click on the plot window to select it
- (2) from the menu, select Tools → Color Preferences
- (3) Color Palette Editor will pop up



## How to set plot window color to white:

- (4) Color Palette Editor: select item = Background
- (5) Red, Green, Blue: all are set to 255



## Result: white plot background

