

Lab Information**Lab consists of the following:**

- Lab Work / Lab Partner:

Lab work must be done in PAIRS (no groups of 3 or more). Be sure to swap responsibilities often, so that BOTH you and your partner experience various aspects of lab (wiring a circuit, taking data, reading test equipment, troubleshooting, etc...).

ALWAYS bring your own lab kit, even if you expect your partner to bring theirs. All too often, one partner does not show up, leaving the other without the ability to complete the lab.

- Prelabs:

Prelabs are designed to prepare you for the lab assignments. They must be completed PRIOR to coming to lab. Experience shows that if you come prepared, you can easily finish on time. Prelabs are checked at the beginning of the lab period. Prelabs must be entered in your lab notebook and are checked at the beginning of lab.

- Lab Notebook:

Each of you MUST maintain a lab notebook. A lab notebook must be *bound* with *numbered* pages. A spiral bound notebook or loose-leaf 3-ring binder is not acceptable!

NOTE: If you have a suitable lab notebook from a previous ECE lab course, you may use it. Just be sure to start a new section.

Entries in your lab notebook should be made IN INK. If a mistake is made, cross out the incorrect entry – never erase. Also, never tear pages out of your lab notebook. These requirements reflect legal standards for laboratory notebooks which are often used to defend company patents (or your own inventions!).

Entries in your lab notebook should include:

- Prelab calculations (know what to expect from your lab measurements ahead of time).
- Circuit diagrams including component values and reference designators (R1, C2, etc.).
- Part numbers of components used. (e.g. 1N4148, LM741)
- Voltage polarities and current directions clearly labeled.
- A distinction between MEASURED values and CALCULATED values.
- Equipment specifications, bench number, and enough detail to duplicate the experiment, if necessary.
- Graphs and tables to organize and present your experimental measurements and results.
- Accurate sketches of pertinent waveforms. Be sure to label axes.

- Lab Report:

Lab reports must be completed on a weekly basis. Only one lab report per group is required. Lab reports are to be passed in the following week during your scheduled lab period. Please include both partners' names on the report as well as your ECE Box numbers.