There are nine laboratory experiments that have been designed to supplement the classroom theory and bring some feeling of reality to electric circuits! YOU MUST COMPLETE ALL EXPERIMENTS TO PASS THE COURSE (a necessary but insufficient requirement). COMPLETE means that you must attend all Labs and turn in all Lab assignments for a passing grade.

**When are the labs?**
The time period during which you can perform each experiment is listed in the Lab Schedule. If you need additional time, it is recommended that you work on the labs during other lab session when the TA is present, if stations are available. If it takes you less time, fine. You don't have to stay after you have finished! However, you must be present at the beginning of your lab session to hear TA’s explanation.

**Can I do the experiments with someone else?**
It is recommended that you work with one partner. You will be expected to submit to GTA an INDIVIDUALLY PREPARED pre-lab homework and ONE lab report per a group that has worked together. Make sure to write both names on the lab report (if working with someone). Also, it is expected that both partners work on the entire lab together, there is no dividing of the work. This is so that students will learn the material thoroughly.

**What tools will I need?**
You will need to purchase a circuit bread board ("proto-board") for constructing your circuits. You might also need (for later courses and projects) a wire kit or spool of wire and your own tools. These items are available at Radio Shack, Mountain States Electronics, etc. or from the student chapter of the IEEE which in past years has sold kits to the students in ECE103/251/202.

**Laboratory format**
For all labs, except Lab1, there will be two documents to turn in.
One of these, the pre-lab homework, will contain some background theory for the lab and some questions/exercises. You will not be allowed to perform the associated laboratory experiment until GTA has received from you a properly completed copy of the Pre-lab HW. "Properly completed" means, in the GTA's judgment, you have made a serious effort to correctly answer the questions!
The second document will be lab report, which is description of the experiment and your results which you will fill out during the lab sessions and turn-in after each experiment. You should, of course, bring a printed copy of every lab with you when you come to your scheduled laboratory session. You can download these documents from the ECE202 website. Prior to coming to the lab, you should carefully read this material since it also will contain some theoretical background information. Since this material must be understood before you can do the experiment it is to your advantage to prepare and/or complete as much of the Report before coming to the lab so as not to waste any of your valuable experiment time!

At the beginning of the first session of each lab GTA will describe the experiment you are required to perform and give any necessary hints for its successful completion. Thereafter, you will be responsible for completing the experiment, including both checking the circuit and locating any
faults. GTA WILL BE AVAILABLE AND PREPARED TO ANSWER ANY QUESTIONS IF YOU HAVE ALREADY MADE AN EFFORT TO FAMILIARIZE YOURSELF WITH THE EXPERIMENT. This means you have even tried to look up the information for yourself (in your book, internet, etc.).

WHEN YOU HAVE COMPLETED THE EXPERIMENT, YOU MUST OBTAIN GTA'S SIGNATURE ON THE LAB REPORT attesting to the fact that you have completed the lab within the allotted time, Lab Reports lacking this signature will be returned ungraded—resulting in failure for the course! DO NOT LEAVE THE LAB WITHOUT IT!

Since there remains the possibility that students could (not that they would) copy results instead of calculating them themselves, the GTA reserves the right to orally question any student and confirm that they indeed understand the procedure. This means don’t copy pre-lab or lab work, LEARN IT!

**Is there a format for preparing the lab reports?**

Use the instructions for each Lab that you find on the ECE202 website. A complete and individual Lab Report will contain the results of the theoretical calculations (which you prepared prior to coming to the lab) as well as the experimental results obtained from your experiments. All of these should be written on the lab experiment sheets. If you need more space, write on the back of the pages. Any graphs should be NEATLY drawn on engineering paper or printed from MATLAB or Excel and attached to the report.

**What is the laboratory grading policy?**

For each experiment:
- Pre-lab HW 10% - you will be given 0, 5 or 10 points
- Preparedness for the lab session 10% - printed and read directions before lab session
- Lab Report 80% - correctness, technical explanation and neatness

For assignments turned in late:
- 1 day late 50% off
- > 1 day late no credit (it will be counted as 0-points, but you still must submit it)

For missing the first week of an experiment:
- 50% off (The TA should not have to explain things more than once)

**When should lab reports be handed in?**

Each Pre-Lab HW assignment (except Lab1) is due at the beginning of lab session. Lab report is due in your lab session at the first meeting after the lab is completed (again, see the course schedule). Exceptions to any of the preceding deadline requirements will only be granted under the most extenuating of circumstances and ONLY IF NEGOTIATED WITH THE INSTRUCTOR OR GTA PRIOR TO THE EVENT. Use e-mail to correspond with the GTA and the ECE202 Instructor.