Instructor: Suat U. Ay (E-mail: suatay@vandals.uidaho.edu )
Mustafa N. Alam (E-mail: alam7145@vandals.uidaho.edu )

Contact Me: By appointment, Post on Blackboard, Send E-mail

Web Page: http://www.blackboard.uidaho.edu/

Class Forum: Blackboard Discussion/Forums

Class Times: Section 51: 14:30 – 17:20 Tuesday
Section 52: 17:30 – 20:20 Wednesday

Credit Hours: 1


Lab Notebook: BookFactory Laboratory Notebook with Scientific Grid Pages. Interior contents include: User Data Page, Laboratory Notebook Guidelines, Table of Contents, and 100 one quarter inch Grid documentation pages with signature and witness blocks. Size: 11" x 8-1/2" (Ask Julie Bollman in the U of I bookstore for the ECE311 Student Lab Notebook).

Lab Kit: Included in Lab Fee and will be handed out in class.

Lab Supplies: A breadboard, wire kit, wire strippers, and the lab kit will be required to setup/perform lab exercises.

Policies: Read lab assignment prior to lab. Preliminary questions must be asked prior to the day it is due! Plan to work on your preliminary a minimum of 2 days prior to being due thus giving yourself time to ask questions. Completed preliminaries and the lab report for previous lab are due at the beginning of the lab. No Late Work Accepted!

Lab Notebook: Follow the requirements found on the first pages of the lab notebook. Work in the notebook is printed clearly in ink as stated above. All entries in the lab notebook will be PRINTED clearly using ink. See the requirements in first pages of the BookFactory Notebook. Labs will be prepared prior to the lab by writing a paragraph describing the objective(s) or goal(s) for that lab, drawing relevant schematics/block diagrams with all components and nodes labeled with designators (i.e. VCC, B, C, E,R1, Cc1, Q1, ...) and a table listing ideal or expected values and the measured values. See Lab Notebook Requirements on ECE311 blackboard page.

Lab Report: Lab reports will be completed using the work in your lab notebook as specified in the requirements on the next page and the Lab Notebook Requirements on ECE311 webpage.
Quizzes: Quizzes covering pertinent subject material will be given at the start of lab after the preliminaries and lab reports from the previous lab are submitted.

Requirements:
1) Read assigned lab and do the preliminary prior to class (not in class!). Be prepared! Do not make assumptions. Ask questions on the Blackboard forums if you are unclear!
2) Late work will not be accepted (Be on time to class). If you have to miss a lab session for a legitimate reason, communicate this to me in advance and arrangements will be made.
3) Each student should ideally build the circuit and perform the lab. However, in classes where the number of students exceeds the available test equipment group work is required. In this case switch between group members allowing each person to build circuits throughout the semester. This is important and will be a skill that will be tested in the lab final!
4) In lab, work in your team (when required see 3) to obtain the required data from measurements and gain understanding of circuit concepts being developed. Record measurements in notebook in **ink. Print clearly** (no cursive!!!). Ask questions if uncertain.
5) During the lab, measurements, graphs, and test equipment used will be recorded or created as required. In some labs, calculations using the measured data will be made in the lab while for other labs calculations may be done outside of the lab as directed by the instructor.
6) Do your own work! You cannot develop new concepts without thinking about and struggling with the material. Copying others work is not acceptable while working with others to gain understanding and insights is desired.
7) The lab report is your work performed in the notebook with the following sections:
   a. **Objective / Goal** – A paragraph describing the purpose for the experiment and its expected results. This is not just a statement of what your are doing but rather WHY and the expected outcomes.
   b. **Procedure** – This section is presented in outline form giving each step and the measured result(s) for that step clearly labeled. The section starts with a schematic labeled with nodes and component designators and table with 4 columns (see Report Format on the webpage). Calculations may or may not be done in this section dependant on the lab experiment. This will be dictated by the instructor.
   c. **Questions / Calculations** – In this section you will answer questions given in the lab and make calculations in some cases.
   d. **Presentation of the Results** – This section uses the expected values determined in the lab preliminary and the measured and/or calculated results from the lab to verify the circuit operational behavior. This is to be done using %Error calculation with respect to the expected value to demonstrate any deviation. A large deviation would be seen while making the measurement and noting the difference from the expected value from
the preliminary thus requiring you to troubleshoot the circuit, correct the problem, and repeat the measurement. Smaller deviations can be due to many issues that will be examined in the lab exercises.

**Academic Honesty:**

Academic honesty is governed by Article II of the University if Idaho’s Student Code of Conduct [http://www.webs.uidaho.edu/fsh/2300.html](http://www.webs.uidaho.edu/fsh/2300.html). Cheating on classroom or outside assignments, including examinations is a violation of this code.

Incidents of academic dishonesty will be kept on file by the instructor and may be reported to the dean of students. Such instances of academic dishonesty may warrant expulsion from the course and a failing grade. All students should be aware that even one incident of academic dishonesty may also merit expulsion from the University.

**Grading:**

<table>
<thead>
<tr>
<th>Point Distribution</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preliminaries</td>
<td>35%</td>
</tr>
<tr>
<td>Lab Notebooks / Report</td>
<td>35%</td>
</tr>
<tr>
<td>Quizzes</td>
<td>10%</td>
</tr>
<tr>
<td>Final</td>
<td>20%</td>
</tr>
<tr>
<td></td>
<td>100%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Grading</th>
<th>90%</th>
<th>100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>90%</td>
<td>100%</td>
</tr>
<tr>
<td>B</td>
<td>80%</td>
<td>85%</td>
</tr>
<tr>
<td>C</td>
<td>70%</td>
<td>70%</td>
</tr>
<tr>
<td>D</td>
<td>60%</td>
<td>60%</td>
</tr>
<tr>
<td>F</td>
<td>0%</td>
<td>59%</td>
</tr>
</tbody>
</table>