ECE 101-202
Introduction to Electrical/Computer Engineering (Lab)
Spring 2018
Thursday (1.30 PM to 3.20 PM)
Engineering Building, Room 3203

Lab Instructor (GTA):
Gaurav Kolhe  
gkolhe@gmu.edu
Office Hours: Room 3203, Tuesday 4PM-6PM
Lab Learning Assistant: Jorge Rodriguez

Lab Policies:

- All documentation related to the labs is posted on Blackboard.
- **Attendance in all Labs and exams is mandatory.** Notify the GTA in advance if you must miss a lab.
- Notify both the course instructor and the GTA in advance if you must miss a lab exam. Make up exams must be scheduled at least 1 week prior to the exam date. Proper documentation will need to be submitted to the instructor in order to schedule a makeup.
- Lab office hours may be used to practice setting up experiments. They cannot be used as a substitute for the regularly scheduled lab times, for which you are expected to be present.
- **If you miss an exam for an unexcused reason you will NOT be given a makeup exam.**
- **Each** student is expected to build the first circuit of each lab and bring the breadboard **prior** to coming to the lab (except lab # 1). All required simulations listed in the pre-lab portion of the labs need to also be completed and printed out **prior** to attendance in the lab. The GTA/LAs will review the circuits and simulation results you brought with you at the start of the lab session.
- Failure to build the circuit ahead of time will result in a penalty of 20 points being deducted from the lab report grade.
- Failure to provide print-outs of simulation results listed in the pre-lab will result in a penalty of 10 points being deducted from the lab report grade.
• Each student will work equally with a partner to complete the experiment.
• Learning Assistants (LAs) are undergraduate students who will be present in each lab to assist you and answer any questions you may have.
• Partners will be shuffled after the midterm exam, which means you will work with a new partner for the rest of the semester.
• The lab midterm and final exam will be administered individually, on the scheduled date. They will be for a duration of 50 minutes. The names and times that each person will take the exam will be posted one week before the exam on Blackboard.
• Students must show the GTA the complete operational circuit in the lab in order to receive credit. The GTA may ask questions to assess the student’s understanding of the experimental set-up. The GTA will then sign and date the experiment.
• Lab reports are due one week after the scheduled date of the experiment.
• Lab Reports will not be accepted after one week of the lab.
• Lab Reports must be legible. Carefully follow the Lab Report Format posted on Blackboard, making sure to include all required sections. Print out and bring the report with you on the due date listed below. Lab reports from the previous week are due at the start of the next lab session time.
• The GMU Honor Code applies to all aspects of this lab.

Grading:

Lab Assignments/reports  50%
1 in-Lab Midterm Exam  25%
1 in-lab Final Exam  25%

Weekly Schedule:

January 25th, 2018  Introduction/Lab rules and safety
February 1st, 2018  Lab 1: Resistors, Voltage and Current
February 8th, 2018  Lab 2: Series and Parallel Circuits (Lab 1 report due)
February 15th, 2018  Lab 3: Light Emitting Diodes (Lab 2 report due)
February 22nd, 2018  Lab 4: Function Generator/Oscilloscope (Lab 3 report due)
March 1st, 2018  Lab 5: Quiz and Voltage Rectification (Lab 4 report due)
March 8th, 2018  Lab Midterm (Practical-In lab)-Labs 1-4 (Lab 5 report due)
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<thead>
<tr>
<th>Date</th>
<th>Event</th>
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<tbody>
<tr>
<td>March 15th, 2018</td>
<td>Classes Do not Meet (Spring Break)</td>
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<tr>
<td>March 22nd, 2018</td>
<td>Lab 6: Simple Filtering</td>
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<td>March 29th, 2018</td>
<td>Lab 7: Transistor Fundamentals (Lab 6 report due)</td>
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<td>April 5th, 2018</td>
<td>Lab 8: Combinational Logic (Lab 7 report due)</td>
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<td>April 12th, 2018</td>
<td>Lab 8: Combinational Logic</td>
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<td>April 19th, 2018</td>
<td>Lab 9: Sequential Logic (Lab 8 report due)</td>
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<td>April 26th, 2018</td>
<td>Practice session for lab final (Lab 9 report due)</td>
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<td>May 3rd, 2018</td>
<td>Lab Final Exam (Practical-In the lab)-Labs 5-9</td>
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