ECE 480L:
SENIOR DESIGN SCHEDULED LABORATORY
SPRING 2014

<table>
<thead>
<tr>
<th>Week of</th>
<th>Topic</th>
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<tr>
<td>Jan. 6</td>
<td>No labs meet this week</td>
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| Jan. 13 | Lab I: Digital Color Organ - Power Supply
t - Lab I Report due Wed 10:20 am Room 221 NR |
| Jan. 20 | Lab II: Digital Color Organ - Mic Amplifier, Line-
Input Summer, Low-Pass Filter and LED Outputs
t - Lab I Report due Wed 10:20 am Room 221 NR |
| Jan. 27 | Lab III: Digital Color Organ - Code Composer Studio and the MSP430
t - Lab II Report due Wed 10:20 am Room 221 NR |
| Feb. 3  | Lab IV: Digital Color Organ - Analog-to-Digital Converters and PWM Output
t - Lab III Paper Report and Lab III Digital Report (emailed to zajacste@msu.edu) due Wed 10:20 am Room 221 NR |
| Feb. 10 | Lab V: Digital Color Organ - Lattice Wave Digital Filters and Testing
t - Lab IV Paper Report and Lab IV Digital Report (emailed to zajacste@msu.edu) due Wed 10:20 am Room 221 NR |
| Feb. 24 | Lab V Paper Report and Lab V Digital Report (emailed to zajacste@msu.edu) due Monday 10:20 am Room 221 NR |

Digital Color Organ demonstration by appointment.

The Digital Color Organ Final Paper Report and The Digital Color Organ Final Report in doc or docx format (emailed to zajacste@msu.edu) due Friday.

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1 Some lab lectures are video recorded and can be found along with the experiments on the ECE 480L home page at: [http://www.egr.msu.edu/~wierzba](http://www.egr.msu.edu/~wierzba)

2 You don’t have to wait to start the next lab experiment but all reports are due as indicated.
MATERIALS:  Bound Lab Notebook

Safety Glasses

GRADING:  The scheduled lab grade is 20% of your overall ECE 480 grade. Here is the breakdown of this part of your grade:

DIGITAL COLOR ORGAN PROJECT
  WEEKLY LAB REPORTS ................. 20%

THE DIGITAL COLOR ORGAN
  FINAL LAB REPORT .................. 40%

DIGITAL COLOR PRESENTATION
  (BY APPOINTMENT) .................. 40%

OVERVIEW:  Although you enrolled in a scheduled lab section, we will be running this as an open lab. The ECE 480 lab will be open 24 hours a day and you can sign-up for six-hours of time per week for any of Lab Stations 1 - 8 at:

https://www.egr.msu.edu/eceshop/Teaching_Labs/ECE480/schedule/

Your login is your MSUNet_ID and your password is your PID. You must change your password after your first login. Lab Stations 9 -13 can not be reserved and are available on a first-come, first-serve basis.

POLICIES:  Any copying of lab data from anyone or posting work on the world wide web will result in a zero lab grade for that material.

Safety glasses are required. Minimally prescription glasses are ok but full wrap around glasses are preferred. We will do spot checks for safety glasses. For each instance of not wearing eye protection, your weekly lab report grade will be lowered by 1%. You will not be allowed to stay in the lab without safety glasses.