

# **ECE 438 Digital Signal Processing Lab**

## **WISE Lab, MSEE 190 (Fall 2014)**

Lab Homepage: <http://www.purdue.edu/WISE/ee438L/>

### **Lab Content**

The experiments in this course generally build upon material covered in lecture. Each experiment describes one or more theoretical concepts, and then presents exercises to implement the concepts within the Matlab environment. All of the lab content is directly relevant to the exercises, so it's important that each section be read and understood before performing the corresponding exercises. As a rule, the entire lab should be read before your section meeting. You'll spend less time in lab that way. If the lab work is not completed during the lab period, the remaining work should be done during open lab time or at home.

### **Lab Order (subject to change)**

Week 1: Introduction & Lab 1

Week 2: Lab 2

Week 3: Lab 3

Week 4: Lab 4

Week 5: Lab 5a

Week 6: Lab 5b

Week 7: Lab 6a

Week 8: Lab 6b

Week 9: Lab 8

Week 10: Lab 9a

Week 11: Lab 9b

Week 12: Lab 10a

Week 13: Lab 10b

Week 14: Extra Lab

Week 15: Thanksgiving Vacation

Week 16: Help Session

### **Attendance**

Students must attend laboratory whenever they are healthy. Students are not allowed to leave before the end of their lab section unless they hand completed lab report to the TA. If you need to miss a lab due to a health problem, job interview or some other reasons, tell the TA as soon as possible. At the end of the section, students should sign out. If the signature is missing, your quiz score will be reduced by 2 points. No cheating is allowed and punishment will be decided by instructors accordingly. No drinking, eating or smoking in the lab.

# Laboratory Components

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## Weekly Quiz:

- 30% of total lab grade (lowest quiz grade will be dropped)
  - 15 minutes to complete and 10 points per quiz, which is based on homework assignments and lab content of the previous week
  - If student is late more than 10 minutes for quiz, will NOT be allowed to take makeup without valid excuse. The makeup quiz may be held during open office hours.
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## Laboratory exercises:

- 70% of total lab grade
  - Work done in groups of two. **Each lab partner needs to perform all of the exercises. Do not divide the exercises between you and your partner.**
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## Lab Report

Only one lab report is required per group. You should each do your fair share of the work in preparing the reports. You only need to turn in what is specifically requested in the “INLAB REPORT” boxes in the lab instructions. No formal reports are required. Please use a cover sheet (a sample is provided in “EE438L Introduction and Guidelines”). Include your names and the lab number/title in the cover page. It is the students responsibility to staple the lab report together (TAs are not responsible for unstapled pages that get lost).

- Report due beginning of the next lab session before quiz.
  - Each student is required to submit an electronic copy of his/her own code before the due time of lab report.
  - Email them to [438lab@gmail.com](mailto:438lab@gmail.com)
  - Compress all your documents into one zip/rar/tar file.
  - Include following information in your file name: Last name, Lab number
  - Late reports will be penalized at 10 points per day
  - Discussion between groups is encouraged, **but sharing code is prohibited**
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## Lab Report Grading

- Lab report is graded out of 100 points
- Grading rubrics established in previous semesters (contain list of points for each exercise and question) will be used to grade lab reports. Rubrics will not be distributed to the students.

## Cheating

Don't do it. Specifically, if you have access to a previously graded lab report, do not even look at it. Certainly do not use someone else's code to perform the exercises. The course has a formal policy for the action taken for these offenses, which includes a reduction in grade and referral to the Assistant Dean of Students.