EECS 360 – Signal and System Analysis
Laboratory Syllabus
Fall 2014

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Schedule:

<table>
<thead>
<tr>
<th>Section 360-1300</th>
</tr>
</thead>
<tbody>
<tr>
<td>2:30PM – 4:45PM, Tuesday</td>
</tr>
<tr>
<td>Eaton 1005A</td>
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<table>
<thead>
<tr>
<th>Section 360-1100</th>
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<tbody>
<tr>
<td>10:00AM – 12:15 PM, Wednesday</td>
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<tr>
<td>Eaton 1005A</td>
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Lab web page: [http://people.eecs.ku.edu/~esp/class/F14_360/lab/](http://people.eecs.ku.edu/~esp/class/F14_360/lab/)

Laboratory Sessions: (Note – Lab schedule and contents might be changed with regards to the lecture.

<table>
<thead>
<tr>
<th>Lab #</th>
<th>Topic</th>
<th>Section 360-1300</th>
<th>Section 360-1100</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Introduction to MATLAB</td>
<td>8/26/2014</td>
<td>8/27/2014</td>
</tr>
<tr>
<td>2</td>
<td>MATLAB Functions</td>
<td>9/2/2014</td>
<td>9/3/2014</td>
</tr>
<tr>
<td>3</td>
<td>Loops in MATLAB</td>
<td>9/9/2014</td>
<td>9/10/2014</td>
</tr>
<tr>
<td>4</td>
<td>Discrete Convolution</td>
<td>9/16/2014</td>
<td>9/17/2014</td>
</tr>
<tr>
<td>5</td>
<td>Fourier Series</td>
<td>9/23/2014</td>
<td>9/24/2014</td>
</tr>
<tr>
<td>6</td>
<td>Audio Filtering</td>
<td>9/30/2014</td>
<td>10/1/2014</td>
</tr>
<tr>
<td>7</td>
<td>Continuous Time Fourier Series</td>
<td>10/7/2014</td>
<td>10/8/2014</td>
</tr>
<tr>
<td>8</td>
<td>Approximation of CTFT</td>
<td>10/21/2014</td>
<td>10/22/2014</td>
</tr>
<tr>
<td>9</td>
<td>DFT and FFT</td>
<td>10/28/2014</td>
<td>10/29/2014</td>
</tr>
</tbody>
</table>
## Requirement and Grading:

The grading is based upon your performance during the lab session and your lab report. Each person is required to submit a **paper report**. Each lab report is due the following lab week at the **beginning of class**.

Late work will not be accepted.

You are expected to show up to every lab session. Exceptions to be considered are illnesses and university sponsored events provided **proper documentation** is given to the lab instructor before the next scheduled lab session.

### Lab Report Format:

(See attached pages for reference)

Page 1: **Cover page:** Lab title, lab report number, date submitted, name and KU ID number.

Page 2&on:

- **Objective:** Give a brief description of the goal of this lab.

- **Description:** Provide a short background on the topic discussed. Provide detailed description of the problem and your solution approach.

- **Results:** Answer all the questions listed in the lab handout with sufficient description (include plots, derivation, etc.). Comment on results.

- **Conclusion.**

- **Appendix:** MATLAB code goes here. If the lab handout contains several sections, divide the appendix accordingly.

Note: MATLAB plots can be converted to images and imported into MS Word.

### Two thoughts:

1. If you don’t ask your question it probably won’t get answered.
2. The lab reports submitted for grading are a demonstration of your professional work. Sloppy work is not acceptable.
OBJECTIVE:
In this report, the general format of the EECS 360 lab report is provided.

DESCRIPTION:
Organize your report:

1. Provide a short background on the topic discussed in the lab.
2. Mention the sequence of steps used to achieve the objectives.
3. Use numbering if needed.

RESULTS:
Provide results in the form of graphs and answers to both questions given during the lab and questions in the lab handout. Give a detailed analysis of your results. This is a good place to note and explain interesting and/or important observations.

![Figure 1: this is a sample](image)

CONCLUSION:
Conclusions and main points learned by the student.

APPENDIX:

Code:

```%
Using code makes your comments easy to read
StringVariable='Give meaningful names to your variable'
```