EECS 206: Signals and Systems I Laboratory Syllabus and Submission Guidelines Winter 2002

Laboratory Sections (held in EECS 2331):

| Section | Day and Time | GSI |
|-------------|--------------------------------|--------------|
| Section 5: | Wednesday 2:30pm-4:30pm | Dongsook Kim |
| Section 6: | Wednesday $4:30$ pm- $6:30$ pm | Charles Hsin |
| Section 7: | Tuesday $9:30$ am- $11:30$ am | Fred Zeitz |
| Section 8: | Tuesday $11:30$ am- $1:30$ pm | Norm Adams |
| Section 9: | Thursday $9:30$ am- $11:30$ am | Norm Adams |
| Section 10: | Thursday $11:30$ am- $1:30$ pm | Dongsook Kim |
| Section 11: | Tuesday $1:30$ pm- $3:30$ pm | Fred Zeitz |

Graduate Student Instructors:

| Name | E-mail | Office Hours |
|-------------------------|-------------------------|--------------------------------|
| Mark Bartsch | mbartsch@umich.edu | <u> </u> |
| Fred Zeitz | fzeitz@engin.umich.edu | M,W 9:30-11:30am |
| Chih-fan (Charles) Hsin | chsin@umich.edu | Tu 12:30-2:30pm, W 1:30-3:30pm |
| Norman Adams | nhadams@engin.umich.edu | M 4-6pm, Th 12:30-2:30pm |
| Dongsook Kim | kimds@umich.edu | Tu, 10:30-12:30, F 10:30-12:30 |

All GSI office hours will be held in EECS 4338, phone #764-5206.

Laboratory Assignments

Laboratory assignments will be assigned roughly weekly. Unless otherwise noted, laboratory assignments are due during your lab section one week from the date on which they are assigned. Laboratory reports will typically not be assigned the week before class exams. A tentative laboratory schedule with topics follows:

| Week of $1/7/02$ | "Laboratory $\#0$ " | Introduction to Matlab |
|-------------------|---------------------|--------------------------------------|
| Week of $1/14/02$ | Laboratory #1 | Signal Statistics and Detection I |
| Week of $1/21/02$ | Laboratory #2 | Correlation and Detection II |
| Week of $1/28/02$ | Laboratory #3 | Sinusoids and sinusoidal correlation |
| Week of $2/4/02$ | No lab assigned | Exam #1 Review |
| Week of $2/11/02$ | Laboratory #4 | DFT and applications |
| Week of $2/18/02$ | Laboratory #5 | Image coding and compression |
| Week of $2/25/02$ | No lab assigned | Spring Break |
| Week of $3/4/02$ | Laboratory #6 | Filtering and Image Processing |
| Week of $3/11/02$ | No lab assigned | Exam #2 Review |
| Week of $3/18/02$ | Laboratory #7 | Telephone touch-tone decoding |
| Week of $3/25/02$ | Laboratory #8 | Speech Modeling |
| Week of $4/1/02$ | Laboratory #9 | Speech Recognition |
| Week of $4/8/02$ | TBA | TBA |
| Week of $4/15/02$ | No lab sections | |
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Laboratory Submission Guidelines

- 1. The laboratories were designed for use on Matlab version 6 running on a Microsoft Windows-based platform. Some Matlab commands and code in these labs may specifically require Matlab 6 or a Windows platform. While you may attempt to use an older version of Matlab or a different platform, you do so at your own risk.
- 2. Laboratory reports will be submitted by laboratory groups of two students. Only one laboratory report needs to be submitted per group. The names of all group members must appear at the top of the report. All members of the group will receive the same grade on the submitted laboratory.
- 3. The College of Engineering Honor Code applies to laboratory reports. Of course, students within a laboratory group may share all results and code. However, note that:
 - (a) Working with students from a different laboratory section is a violation of the Honor Code.
 - (b) Sharing MATLAB code or results between laboratory groups is a violation of the Honor Code.
- 4. Hard copies of all laboratory reports must be handed in at the beginning of the laboratory section during which the reports are due. Late laboratory reports will not be accepted.
- 5. Laboratory reports for this course are *not* formal laboratory reports. Instead, the reports will have two main sections. The first section contains "answers" to the numbered problems in the laboratory assignment. The second section is an appendix containing *all* of the Matlab commands and code that you used to generate your answers and figures for the first section. It is *not* necessary for you to include Matlab code that is provided to you on the course web page.
- 6. All laboratories *must* be typed. Additionally, all figures must be included in the text of the report. We strongly recommend the use of Microsoft Word on a Windows platform for this task. Further, all figures *must* include:
 - Descriptive axis labels with units (if appropriate)
 - A descriptive caption with a figure number.
 - The code used to generate the data, figure, and all labels must be included in the MATLAB appendix at the end of your report.