Digital Signal Processing

Instructor: T. R. Fischer
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Office: EE/ME Tower, Room 404. Office hours: MW 3:10-4:00 pm, Thursday 2:00-3:00 pm, or by appointment.


References:
2. J. G. Proakis and V. K. Ingle, *Student Manual for Digital Signal Processing with Matlab*, Pearson Prentice-Hall 2007. (This book contains complete solutions, including Matlab code, for many (most) of the problems in the DSP using Matlab companion text listed above. Note, however, that some of the problem numbers are inconsistent in the two books.)
4. *Student Edition of Matlab*, or at least a good tutorial on Matlab. (Many Matlab tutorials are available on the web. Just do a search on “Matlab tutorial,” and find one that you like.) Two on-line tutorials are

Course Requirements

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<tr>
<th>Requirement</th>
<th>Percentage</th>
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<tr>
<td>Homework*</td>
<td>10%</td>
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<tr>
<td>Computer Exercises*</td>
<td>10%</td>
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<td>Tests (2)</td>
<td>40%</td>
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<td>Project*</td>
<td>15%</td>
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<td>Final Exam</td>
<td>25%</td>
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Approximate Test Dates:

- Test 1 – Wednesday, October 6.
- Test 2 – Wednesday, November 10.
- Final Exam – Monday, December 13, 8:00 am.
- Project Due Date: Wednesday, December 8.

* The homework, computer exercises, and project are the most important part of the course! This is because in doing the homework, computer exercises, and project, most of the learning takes place and the practical value of DSP becomes apparent.
The course will cover most of the text Chapters 1-8, Chapter 9.1-9.3, and Chapter 10, plus very limited portions of Chapters 11 and 12 (if time permits). Most of Chapters 1, 2, and much of Chapters 4, 5 are covered in the prerequisite course EE 341, and so will only be briefly reviewed in class.

**Collaboration Policy:** You are free to talk with other students about the homework, computer exercises, and project. This includes discussing approaches to solving problems or projects, and discussing approaches to writing Matlab code necessary to solve problems or projects. All work submitted must be your individual effort. You may use Matlab code already published (e.g., on the web, in the “Student Manual” referenced above, etc.) provided that the code is properly referenced. However, you may NOT share Matlab code with other students in the course (nor share Matlab code with other WSU students, graduate students, etc.).

**Accreditation Board for Engineering and Technology (ABET) Information**
The ABET course syllabus is posted on the EECS website, as is the assessment process.

**Academic Integrity:** The EECS academic integrity policy is on-line at http://www.eecs.wsu.edu/eeungrad/
It is each student’s responsibility to read and know the policy. The University Policy on academic integrity is on-line at http://conduct.wsu.edu/ under the “Academic Dishonesty” link. In EE 464, students may discuss the homework and computer exercises, and work together to solve the homework and exercises. However, all of the work that is submitted must be individual effort (that is, no copying of some else’s homework solution, computer program, plots, etc.). For example, you may discuss a Matlab exercise, how to approach the problem, what Matlab functions can be used, etc., but all programs should be your own effort.

**Special Needs Students:** Accommodations are available for students who have a documented disability. Please notify the instructor during the first week of class of any accommodations needed for the course. Accommodations must be approved through the Disability Resource Center in Administration Annex 206, 335-1566.