EE 521  Digital Signal Processing
Fall 2004 Syllabus

Professor: Prof. Mark Fowler

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Course Web Site: See the “EE521” link at http://www.ws.binghamton.edu/fowler/

Check this site often since this website will be used to:
• convey any important announcements about the course
• distribute course material (including full Lecture Notes – download and bring to class)
• post HW assignments and (later, of course) their solutions
• Etc.

Office Hours: - After class
              - M & Th 12:00 – 1:30
              - Or by appointment.

Texts:
• A Course in Digital Signal Processing, B. Porat (The required Textbook)
• Portions of two other books (available for 2 Hr check-out in the Reserve Library):
  • Advanced Topics in Signal Processing, J. S. Lim and A. V. Oppenheim
    o Ch. 1 - 3
  • Statistical Digital Signal Processing and Modeling, M. H. Hayes
    o Ch. 8

Prerequisites: An undergraduate course in discrete-time signals and systems and
undergraduate-level course in probability and statistics

Quizzes, Exams, & Homework:
• One midterm exam (Take Home)
• A cumulative final (during Finals Period)
• HW will be assigned roughly every week

Tentative Exam Schedule:
• Midterm, Late-October to Early November
• Comprehensive Final, during finals period

Course Grade: Homework = 10%
Midterm = 45%
Final = 45%

To Be Determined
HW:  - Due at beginning of class;
- Roughly one assignment per week
  - You are **encouraged to work** (e.g., discuss, get advice from) on HW’s with
    others, but you must do your own write-up. **In other words, you can get help
    but you can’t just get the answer. If your write-up is too similar to others
    you will be penalized.**

Midterm:  - Take-Home Exam
  - You are **NOT** allowed to interact (e.g., discuss, get advice from) with anyone
    (in person or online). **In other words, you DO IT YOURSELF!**

Final:  - During final period… Take-Home Exam
  - You are **NOT** allowed to interact (e.g., discuss, get advice from) with anyone
    (in person or online). **In other words, you DO IT YOURSELF!**

**How to Maximize Your Partial Credit**
The key to getting maximum credit on your work is to make sure that you make it easy for me to
figure out what you have done. I can only do that if you present your ideas in a readable, logical,
and understandable way. When writing your answers, you will increase your chances of getting
partial credit if you:

1. Use drawings and diagrams to explain what you are doing (these don’t have to be
   elaborate – hand-drawn sketches are fine)
2. Write legibly (if I can’t read it I can’t grade it)
3. Clearly state your assumptions.
4. Indicate why you are doing something
   a. Tell what you are doing and why you are doing it!
   b. E.g., before you take the derivative of something, state why you are taking the
      derivative
5. Use words to transition between your equations (believe it or not, a string of equations
   left unbroken by commentary is virtually impossible to decipher – try blacking out all
   the words in your text book and read only the equations!)
   a. **If you only write down equations you will get very little credit!! How am I
      supposed to figure out what you did if all I see is a string of equations!**
6. Use words to define symbols that are used.
7. Before you begin your detailed development, provide a brief overview or plan of what
   you are going to do.
8. At the end of your development, **comment** on what the result tells you. **This** is what
   engineering is all about!!!