Course: Communication Systems
ECSE 4520 - Section 01
Fall Semester 2005

Electrical, Computer and Systems Engineering Department
Rensselaer Polytechnic Institute

Homework 1 - Due Tuesday, September 13, by the end of lecture.

Problems from required text:

1. Chapter 2 Problem 2.10
2. Chapter 2 Problem 2.14
3. Chapter 2 Problem 2.15
4. Chapter 2 Problem 2.17
5. Using Matlab, determine and plot the magnitude and phase spectra of the signal

$$x(t) = \begin{cases} t+1 & \text{for } -1 \leq t \leq 0 \\ 1 & \text{for } 0 < t \leq 1 \\ 0 & \text{otherwise.} \end{cases}$$

Homework may be handed in early by slipping it under my door or putting it in my mailbox. Late homework shall NOT be graded.

Remember, working in groups is strongly encouraged, however, you must hand in *your own work.*