University of Rhode Island Department of Electrical and Computer Engineering
ELE 435: Communication Systems

BPSK Report and Grading Format

1   Report Format

1. Briefly explain the procedure (what you did in the lab)

2. Show the Results/plots

3. Matlab Assignment: Write MATLAB code for the following.

    (a) Generate a Phase-shift keyed signal, for a binary sequence shown in figure 7.1 (a) (refer to page 266 of the textbook). Figure 7.1 (c) shows the result

    (b) Generate the spectrum of a BPSK signal. Your results show look similar to figure 7.5, page 272 of the text book. Refer to page 267 for specifications to implement the code.

4. Answer the following questions

    (a) What are the three basic digital band-pass modulation techniques?

    (b) What are the three distinct forms of binary modulation? Briefly discuss them.

    (c) When is a digital communication system coherent, and when is it incoherent or non-coherent? Does one have an advantage over the other, if so why?

    (d) In our own words, briefly talk about BPSK (pages 270-271 in the textbook)