

# ECE 4213/5213

## Homework 1

Fall 2023

Dr. Havlicek

Work the Projects and Questions in Chapter 1 of the course Laboratory Manual, including the “optional” parts. You can download a PDF version of the course Laboratory Manual from the “Handouts” section of the course web site.

You do not need to worry about Section 1.2 of the Laboratory Manual on pp. 1-2: it is legacy information about installing Matlab and how to obtain the “Report” and “Program” files for doing this assignment. All of the files you need are available for download on the “Handouts” section of the course web site.

Use the report format specified in the file LABEX1.doc provided in the “Handouts→Lab Manual→REPORTS” section of the course web site. You should download this file and edit it to make your “turn-in” file for this assignment. When you are finished with the assignment, you should print the file to PDF and turn in the PDF version on Canvas. If you have problems printing to PDF, it is also acceptable to turn in the “.doc” version.

You may use the *m*-files provided in the “Handouts→Lab Manual→PROGRAMS→LABEX1” section of the course web site.

As you work through the assignment, you should be following along simultaneously in three different documents: (1) this assignment – because the assignments will typically list any typographical errors and clarifications you need to be aware of and will also tell you about any problems you can omit; (2) the course laboratory manual – because it is the definitive specification for the assignment; and (3) the LABEX1.doc WORD file – because it is what you will use to prepare your “turn-in” file for the assignment.

**Note:** In the Lab Manual, Mitra writes  $\mu[n]$  for the discrete-time unit step function. In our *Oppenheim & Schaffer* text and in the notes it is written  $u[n]$ .

**Note:** In Q1.41 on page 13 of the Lab Manual, in the second line it says “Figures A.1 and 1.2.” This is a misprint. It should say “Figures 1.1 and 1.2.”

Submit this assignment electronically on Canvas.

**DUE: 8/30/2023, 11:59 PM**