University of Massachusetts Dartmouth
Department of Electrical and Computer Engineering

ECE 320 DISCRETE-TIME LINEAR SYSTEMS

Fall 2013

MATLAB **Project 1**

Convolution and Eigenfunctions

Issued: Tuesday, September 17, 2013 **Due:** Tuesday, October 8, 2013

Before you do this project, you should do Tutorials 1.1, 2.1, and 2.2 Buck, Daniel & Singer book. **You do not need to hand these tutorials in.** They will teach you how to use the functions you need to do the other parts of the project. Some of these function you have already seen on PS 1 & 2.

Part 1: Buck, Daniel, & Singer, Project 2.7, parts (a)–(e).
Part 2: Buck, Daniel, & Singer, Project 2.10, parts (a)–(e).
Part 3: Buck, Daniel, & Singer, Project 3.4, parts (a)–(c).

This is a group project. Each group will hand in only one report, signed by each member of the group to certify their participation and understanding. Only members of the group who actively participated in the work should sign the report. **The report must include meeting minutes which document clearly which team members attended each meeting, and which team members were responsible for which tasks.** All members of the group will receive the same grade for the report based on the level of understanding demonstrated by the written work. You are welcome to divide the work up within the group, but when you are finished each group member must understand all parts of the project, not just those they did themselves. In addition to completing your own work, part of the assignment is for to explain your share of the work to all your partners clearly enough that they can explain it to the class.

Remember that non-participating group members may be fired from the group after one warning as discussed in the course information handout distributed at the first class meeting. Students fired from a group must either convince another group to hire them, or complete the entire project on their own.

When you write your report, please include printouts of all MATLAB programs and scripts you wrote. Also, all graphs should have all axes labeled and a title. I will not spend time trying to figure out which graphs are for which problems. Any graph not labeled will be considered not handed in.