EE 311 **January 27, 2018**
Assignment 03 **Due: February 5, 2018**

Download Asn03.zip from the website. Open the project in Keil V5 and load it to the ARM Nucleo board. For this assignment you will measure the frequency response magnitude of a digital FIR filter.

Begin by determining what the sample frequency is by using one of the methods outlined in assignment 1. You should then collect data to plot the frequency response of the filter. Do this by measuring the gain of the filter from 0Hz to fs/2Hz in increments of 200 Hz. The gain is the amplitude of the output signal divided by the amplitude of the input signal. Enter the gain and frequency numbers into MatLab and plot your measured data.

Turn in the following:

1. Title page with your name, date turned in, and assignment number.
2. Your measured sample frequency and a tabulated list of your measurements and the calculated gain.
3. A Matlab plot that has the measured frequency response.
4. Your commented Matlab code.

Be sure to add appropriate figure numbers, titles, and axis labels to your plots.