ECE2260
Lab2 – Report Point Breakdown

Communication	30 Points Total
Organization (ease of locating figures/code/etc)	5
Clarity of style (ease of reading, and etc.)	5
English (grammar, punctuation, and etc.)	5
Introduction	3
Figure titles and numbers	3
Equations explained (at least one sentence between equations)	4
Matlab listings and comments	5
Component Measurements	5 Points Total
Explanation of procedure for finding R_s, C_s	3
Table listing R_s, C_s (Measured Values)	2
Preliminary Work	24 Points Total
Derivation of Fourier series coefficients for triangle wave	4
Matlab Code of function summing Fourier series	2
Matlab Plot of 1kHz triangle wave using function summing Fourier series	2
Explain how Fourier series for $v_o(t)$ obtained using phasors	2
Matlab Code calculating $v_o(t)$ for arbitrary component values	2
Matlab Plot of $v_o(t)$ for component values in handout (blocks 1.2kHz) 1kHz=1/1ms triangle input	2
Matlab Code plotting frequency response, $\|H(s)\|$, vs frequency for arbitrary component values	2
Matlab Plot of frequency response, $\|H(s)\|$, vs frequency for component values in handout	2
Explain above Matlab Plot of $v_o(t)$ given frequency response plot	2
Matlab Plot of $v_o(t)$ for component values in handout (blocks 1.2kHz) 0.6ms triangle input	1
Explain Matlab Plot of $v_o(t)$ given frequency response plot	1
Matlab Plot of $v_o(t)$ for component values in handout (blocks 1.2kHz) 0.834ms triangle input	1
Explain Matlab Plot of $v_o(t)$ given frequency response plot	1
Circuit Design	14 Points Total
Determine values of C_1 and C_2 that will block 1kHz and pass 3kHz (ignore R_s and C_s)	3
Matlab Plot of frequency response, $\|H(s)\|$, vs frequency for your component values (and R_s and C_s)	2
Matlab Plot of $v_o(t)$ for your component values (and R_s and C_s) 1kHz=1/1ms triangle input	3
Explain Matlab Plot of $v_o(t)$ given frequency response plot	2
Explain why ideal model of inductor gives different result than actual response at 3k Hz	4
Measurements (all for ≈1kHz triangle wave input)	15 Points Total
Table listing all measured Component Values for your actual circuit (blocks 1kHz, passes 3kHz)	3
Explain procedure for measuring frequency response, $\|H(s)\|$, vs frequency for your actual circuit	3
Plot of measured frequency response, $\|H(s)\|$, vs frequency for your actual circuit	3
Explanation of how you chose actual Fundamental Frequency of your triangle wave input (≈1kHz)	3
Plot of measured $v_o(t)$ for your component values with 1kHz triangle input	3
Comparison of Calculated and Measured Results (all for ≈1kHz triangle wave input)	5 Points Total
Matlab Comparison Plot of Calculated and Measured freq response, $\|H(s)\|$, vs freq for your circuit	2
Matlab Comparison Plot of Calculated and Measured $v_o(t)$ for your component values (and R_s and C_s)	2
Comments on Measured vs. Calculated Comparison	1
Completed report	2 Points Total
Conclusion	5 Points Total