ECE4703 Laboratory 3 Grade Sheet

Student Names & Box #:

Please staple this gradesheet to the back of your report for grading.

Lab Signoff (75 pts. max)

Requirement	Maximum Points	Points Received
Team able to demonstrate magnitude response, phase response, and impulse response of their DTMF IIR filters in Matlab (any realization form, any coefficient quantization)	5	
Team able to demonstrate real-time operation of floating point DTMF filters (magnitude response as well as ability to separate low/high tones) in both single-section and SOS realization forms	20	
Team able to demonstrate real-time operation of 16-bit and 8-bit fixed point DTMF filters (magnitude response as well as ability to separate low/high tones) in both single-section and SOS realization forms	30	
Team able to explain their code for Direct Form II SOS IIR filtering in context of the signal flow diagram (including implementation of scale factors)	10	
Team has determined and can demonstrate the least number of bits of resolution for fixed-point coefficient quantization such that each filter remains stable.	10	

Lab Report (50 pts. max)

Test	Maximum Points	Points Received
Introduction	5	
Background and methods	5	
Solution	10	
Results	15	
Conclusion	5	
Code documentation	4	
References	2	
Overall clarity, appearance, grammar, and spelling	4	