# ELEC 3004 – Systems: Signals & Controls

# Assignment 0: Feedback Guide

#### Overview

Good peer feedback should be constructive.

What do we mean by that? Students should be able to build on the feedback they receive to improve their understanding. When giving feedback it can be helpful to imagine ourselves in the position of the person who wrote the answer. What questions about the problem or their answer to it might they like to have addressed? Good feedback is relevant, specific and detailed and offers suggestions for improvement.

### **Question 1:**

Since this question is not rich, many of the answer will not be either and so neither will your feedback. The most basic questions to answer are is the answer given correct and is it made clear which Laplace transform relates to which function? This clarity could be achieved in a sentence, as in the answer key, or using mathematical notation such as  $L\{\delta(t)\}=1$  or  $\Delta(s)=1$ .

The student may have provided additional information for extra credit such (up to +3) as:

Defining  $\delta(t)$  and u(t) within the time domain

Defining the Laplace transform  $L\{f(t)\}=F(s)$ 

Combining these in order to derive  $\Delta(s)$  and U(s).

If so, is the extra information provided clearly expressed and relevant?

#### Grade:

4-5	Correct, but no clear – No attempt to make it clear what the answer is for ("1,1/s")		
9-10	Correct answer with clear description		
12-13	Excellent – Would make Wikipedia blush		

### **Question 2:**

In Question 1, while some students will have earned extra credit by deriving the Laplace transforms, the answers could quite reasonably have been delivered form memory or looked up in a table. In this question, however, the answer cannot reasonably be arrived at without a process of working out. Does the answer, therefore, show a clear step-by-step process of working? Does the working demonstrate clear understanding or are there errors? Some errors are just carelessness etc. but sometimes errors are evidence or misconceptions. If you can spot the reason for an error and respond to that it is more helpful than just correcting the error itself. An example of this might be if a student gave the poles as 1 and 3, rather than -1 and -3. Just saying, "You forgot the minus," isn't that helpful. It would be better to say, "Poles are the roots of the factors in the denominator, i.e. the values that make the factors equal to zero and the transfer function tend to infinity, so if one of the factors is (s + 3) then the corresponding pole is -3, not 3"

#### **Grade:**

4-5	Almost correct. Small error(s) in computation	
7	Correct answer with no explanation or unclear description(s)	
9-10	Excellent – Correct and well worked out.	

# **Question 3:**

There are a number of approaches to this question which are equally valid, so make sure you take and open-minded and unbiased approach in your marking and feedback where the student has taken a different approach to your own. Feel free to discuss and compare your own approach to the question, however. One advantage of this peer feedback process is gaining different perspectives.

#### **Grade:**

2	Almost correct. Small error(s) in analysis (e.g., inversion of capacitance impedance)	
8-10	Correct with Good (8) to Excellent (10) explanation of the solution	

# **Question 4:**

This guide so far has tried to encourage you to be relevant, detailed and specific and to suggest improvements to problems you have highlighted. In light of this do you feel the comments left for us are constructive feedback? If you were running ELEC3004 would you find the comments helpful in the continued development of the course? Here is an example of how constructive feedback has real relevance to you and impacts on your learning experience.

### **Grade:**

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