

# ECE 147B Lab *n* Report Template

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## 1 Abstract

The abstract should clearly summarize *all* sections. Refer to sections like this: [section 3](#). Refer to subsections like this: [subsection 4.1](#).

## 2 Introduction

The introduction is simply a more detailed version of the abstract.

## 3 Pre-Lab Exercises

### 3.1 Week 1

Probably some boring math here...

### 3.2 Week 2

and here as well. Align equations with equal signs like this:

$$1 = 1$$

$$2 = 2$$

If desired, enumerate steps like this:

1. Justify your answer; answers with no explanation will receive no credit.
  - (a) Is the system  $y(t) = \int_0^{t+1} x(\tau - 1)d\tau$  causal?
  - (b) Is the system  $y(t) = tx(t^2)$  linear?
2. Consider the differential equation  $y'' + y = x$ .
  - (a) Determine the corresponding transfer function.
  - (b) Determine the state-space representation of the system.

This style of enumeration may be used throughout the report.

## 4 Procedure

### 4.1 Week 1

Code-style text can be written like this: `rlocfind`. Refer to figures like this: [Figure 1](#). All figures must be in the `figs` directory.

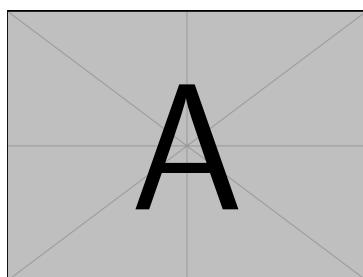


Figure 1: Example figure with a single graphic. It should usually be bigger (around  $0.6\backslash linewidth$ ).

Refer to code fragments like this: [Code Fragment 1](#).

```
s = tf('s');
G = (s^4+3*s^2+2)/(6*s+9);
figure;
margin(G);
```

Code Fragment 1: Example code fragment.

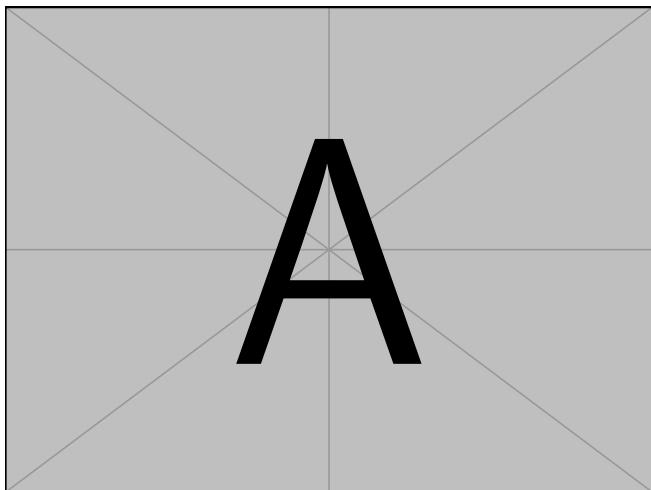
## 4.2 Week 2

Rest of the procedure goes here.

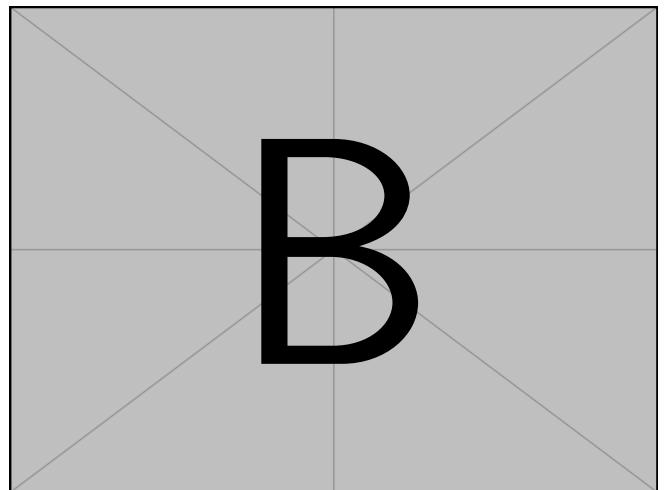
## 5 Results

### 5.1 Week 1

Below is a crucial example of a figure with multiple graphics, each in its own subfigure:



(a) Subfigure (a)



(b) Subfigure (b)

Figure 2: Example figure with two graphics, each in its own subfigure.

Refer to the overall figure as before: [Figure 2](#). Refer to each subfigure like this: [Figure 2a](#), [Figure 2b](#).

## 5.2 Week 2

Probably many, many more plots here...

## 6 Discussion

### 6.1 Week 1

This is the part where you turn off your brain and ask ChatGPT to explain your results.

### 6.2 Week 2

Here as well. And you're done!