**Experiment 25**: Transient Circuit Design

(Edit this document as needed)

Partner 1: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Partner 2: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

*Part A*

Schematic of the first order circuit.

Plot of the capacitor voltage (M1K board, Alice data logger).

Plot of the amplifier output voltage (M1K board, Alice data logger).

Pictures of the LED.

Plot of the capacitor voltage (LTspice).

Plot of the amplifier output voltage (LTspice).

Description of your design process.

Circuit parameters of interest.

Effect of doubling the resistance (including measurement results).

*Part B*

Schematic of the second order circuit.

Plot of the capacitor voltage (M1K board, Alice Desktop).

Plot of the capacitor voltage (LTspice).

Description of your design process.

Circuit parameters of interest.

Effects of changing the resistance (including measurement results).

Due: April 21th, 2021 at 11:59 pm eastern on Gradescope

One student submits on Gradescope and adds their partner using “add group members” option on Gradescope.