

ECE-231 grading rubric for Lab Assignment#8.2. Spring 2024

The video should demonstrate the following:

3.1 When a momentary push-button switch is pressed, display the temperature in degrees C. When the button is not pressed, display the temp in degrees F (or vice-versa).

3.2. Display the temperature to 3 significant figures with a precision of 0.1 degrees, followed by the letter C or F. For example, with an ambient room temperature of 70.0 degrees F, or 21.1 degrees C, your display should read 70.0F or 21.1C, depending on the position of the pushbutton switch.

3.3 Your thermometer only needs to display temperatures in the range from 32.0F to 99.9F and 0C to 37.7C (This eliminates the need to display a - sign or add a 5th digit to the display.)

Grading Rubric:

10 Points. Video demonstrates items 3.1 and 3.2 above; The temperature should be reasonable (within ~10 degrees) but accuracy is not important.

7 Points. Video demonstrates temperature but the display does not show 3 significant figures followed by the letter C or F.

5 Points. The display shows only Celcius but not Farehneit or vice-versa.

2 or 3 Points. Student appears to have made a reasonable effort on the project, but temperature is not visible on the display.

Once this score is calculated, deduct 20% per day late penalty. Anything that is submitted up to 24 hours late is assessed 20% late penalty; 24- 48 hours is to be assessed a 40% late penalty, etc..