1. **OBJECTIVES**

The objectives for lab 9 were to study ADC conversion, the Nyquist Theorem, aliasing, analog amplifiers, low pass filters, data acquisition systems, and to develop a temperature measurement system using a thermistor.

1. **HARDWARE DESIGN**

See the schematic file

1. **SOFTWARE DESIGN**

See the software files

1. **MEASUREMENT DATA**
   1. Three Waveforms (Procedure 1)

To see the data points given in the graphs below, please see Procedure1.xls

*Figure 1: Sampling at 10x the signal frequency gives a nice sine wave and seems to represent the signal rather well.*

*Figure 2: Sampling at greater than 2x the signal frequency seems to capture the data reasonably well, but doesn’t give a nice sine wave (this one appears rather jagged).*

*Figure 3: Sampling at 0.5x the signal frequency shows the horrid results of the aliasing effect. The data does not reflect the signal at all. It’s not even a sine wave.*

* 1. **Static Circuit Performance (Procedure 2)**

1. **ANALYSIS AND DISCUSSION**

None