

AME40453 - Automation and Controls  
C1 Pre-Lab Assignment

Please refer to the lab handout for the following. Write your answers on engineering paper to be handed in at the beginning of the C1 lab. Transcribe any important equations you derive into your lab notebook.

1. Solve Eq. (2) for  $R_S$  as a function of  $V_S$ .
2. In Matlab, use Eqs. (1) and (2) and the calibrations constants to make a plot of temperature  $T$  as a function of voltage  $V_S$  over a range of 3 to 10 Volts.

(Remember, theoretical plots should be smooth, continuous curves.)