

# AME 40453 – Tech Memo Score Sheet

C7 – Inverted Pendulum

NDID#: \_\_\_\_\_

For more details on any of the items below, please refer to the lab handout.

**Please include a horizontal line denoting the set-point angle for the relevant plots listed below.**

| <b>Item and Description</b>  | <b>Points Awarded</b> | <b>Possible Points</b> |
|--|-----------------------|------------------------|
| <b>Technical writing</b> – Using the correct format, address all questions from the lab handout, and include equations from the pre-lab.   |                       | 5                      |
| <b>A table containing the system parameters: <math>m</math>, <math>R</math>, <math>\lambda</math>, <math>\omega_d</math>, the LQR feedback gains <math>k_p</math> and <math>k_d</math>, and the weight <math>R</math> used to limit actuation.</b> |                       | 5                      |
| <b>A plot of the angle vs. time for some of your tests of the open loop controller from Part III.</b>  |                       | 5                      |
| <b>A plot of the angle vs. time for some of your tests of the LQR controller from Part IV.</b>   |                       | 5                      |
| <b>TOTAL</b>   |                       | 20                     |