AAE 364L – Experiment #3 Grading Sheet   **Name_____**
The Control of an Inverted Pendulum

	Possible	Points

Cover Page - 1

	Possible	Points
Title, Name, Course, Date, TA etc.	1	
Subtotal	**1**	

Introduction - 4

Objectives/Goals/Purposes	2	
Intended Methods	2	
Subtotal	**4**	

~~**Procedure – 10**~~

~~Definition of Variables including State Variables~~	~~2~~	
~~Schematic and Description of Apparatus~~	~~3~~	
~~Procedure of Experiments~~	~~5~~	
~~Subtotal~~	~~10~~	

Results - ~~20~~ 10

Part (i) Gains from pole placement and LQR, matrix Q and R for LQR	5	
Part (i) Plots of system poles, using pole placement and LQR	5	
~~Part (ii) Gain from LQR, matrix Q and R for LQR~~	~~5~~	
~~Part (ii) Plot of system poles for LQR~~	~~5~~	
Subtotal	**~~20~~10**	

Analysis and Discussion – ~~30~~ 10

~~Nonlinear EOMs~~	~~2~~	
~~Linearized EOMs and equilibrium points~~	~~2~~	
~~State variables, state vector, system matrices A,B,C,D for both long and medium pendulum~~	~~6~~	
Part (i)	10	
~~Part (ii)~~	~~10~~	
Subtotal	**~~30~~10**	

Conclusion and Recommendation – 10

Main Points	5	
Theoretical/Experimental Limitations	3	
Personal Lessons Learned and Suggestions for Improvement	2	
Subtotal	**10**	

Style, Participation, and Prelab – 25

Organization	4	
Grammar	3	
Neatness	3	
Participation	5	
Prelab	10	
Subtotal	**25**	

Total	**~~100~~60**	