Thesis Outline

Chapter 1: Introduction (3-5 pages)

Chapter 2: Hardware Description
- Arduino description
- sampling time issues
- motor encoders
- rate gyro
- slopes vs serial
- # of signals

Chapter 3: Model Equations
- theoretical
- getting the parameters

Simulink Code for flexible testbed

Chapter 4: Control System Design & Simulation

Chapter 5: Hardware Results
LQR-based integral tracking system.

Chapter 6: Conclusions & Future Work