

# ME131 Vehicle Dynamics and Control

## Lab 9: Lateral Control: Simulink

**Assigned: 4/17/2019    Due: 4/24/2019, 11:59pm (On bCourses)**

Please submit a .zip file of your solution pdf and all relevant matlab/simulink files. When videos are required, please only submit the link as part of the solution PDF document. Late homeworks will be penalized.

### **Problem 1    Lab Deliverables (30pt)**

- 1.1** (20pt) Complete the **Lateral Controller** subsystem. Use any controller (LQR, PI, PID, etc) you'd like and explain how the controller works. Include a screenshot of the controller in your PDF. from Task 2.1.
- 1.2** (10pt) Submit a video recording of the lane keeping simulation as a video link from Task 2.1.