CALIFORNIA INSTITUTE OF TECHNOLOGY

Control and Dynamical Systems
CDS 270: Robust, Optimal and Adaptive Control

Annenberg 106, Fridays, 10 am – noon.
Spring 2015

Instructor
Eugene Lavretsky, eugene.lavretsky@boeing.com
Office Hours: Fridays, by appointment

Grading
Letter or Pass/Fail.

Prerequisites
Basic understanding of linear systems theory and control methods, Ability to simulate dynamical systems in MATLAB.

Course Outline
The main goal of this course is to present a set of robust, optimal, and adaptive control concepts, their solutions, and theoretical challenges for dynamic systems with incomplete measurements and uncertainties. Industrial applications will be discussed. The course material will cover selected chapters from the course textbook [1]. Homework will be assigned once a week. Mid-term and Final exams will be given.

Grading
Attendance 5%
Homework 40%
Midterm 25%
Final 30%

Course Textbook:

Supplementary Textbooks