



Course Calendar

Class	Day	Date	Topic	Due
1-1	R	9/2/10	Introduction to Linear Control Systems	
	F	9/3/10	<i>Lab 1 – Time Domain Analysis of a 1DOF Rectilinear System</i>	Prelab 1
1-2	M	9/6/10	Models of Physical Systems (Electrical)	Quiz 1
1-3	T	9/7/20	Models of Physical Systems (Mechanical)	HW 1
2-1	R	9/9/10	Block Diagrams	Prelab 2
	F	9/10/10	<i>Lab 2 – Frequency Domain Analysis of a 1DOF Rectilinear System</i>	
2-2	M	9/13/10	State-Space Representation	Quiz 2
2-3	T	9/14/10	State equations solution and transfer functions	HW 2
3-1	R	9/16/10	Transient and Steady-State Response Analysis	Prelab 3
	F	9/17/10	<i>Lab 3 – Analysis of a 2DOF Rectilinear System</i>	
3-2	M	9/20/10	Transient and Steady-State Response Analysis	Quiz 3
3-3	T	9/21/10	Stability Analysis – Routh-Hurwitz Criterion	HW 3
4-1	R	9/23/10	<i>Midterm 1 – up through lecture 3-2</i>	
	F	9/24/10	<i>Lab 4 – Model Matching</i>	Prelab 4
4-2	M	9/27/10	Stability Analysis – Routh-Hurwitz Criterion	Quiz 4
4-3	T	9/28/10	Steady-state error	HW 4
5-1	R	9/30/10	Steady-state error	Prelab 5
	F	10/1/10	<i>Lab 5 - Practical</i>	
5-2	M	10/4/10	Sensitivity Analysis	Quiz 5
5-3	T	10/5/10	Sensitivity Analysis	HW 5
6-1	R	10/7/10	Root Locus Analysis	Prelab 6
	F	10/8/10	<i>Lab 6 – Root Locus</i>	
6-2	M	10/11/10	Root Locus Design	Quiz 6/HW6
6-3	T	10/12/10	<i>Midterm 2 – up through lecture 6-1</i>	
FALL BREAK October 14 – 15, 2010				
7-1	M	10/18/10	Lag and Lead Compensator Design	
7-2	T	10/19/10	PID Compensator Design	Quiz 7/HW7
7-3	R	10/21/10	Pole and Zero Placement	Prelab 7
	F	10/22/10	<i>Lab 7 – PID Control</i>	
8-1	M	10/25/10	Frequency Response Analysis – Nyquist Criterion	Quiz 8
8-2	T	10/26/10	Frequency Response Analysis – Gain and Phase Margin	HW 8
8-3	R	10/28/10	Frequency Response Design – Lag and Lead Compensation	Prelab 8
	F	10/29/10	<i>Lab 8 – PID Control</i>	
9-1	M	11/1/10	Frequency Response Design – Lag-Lead Compensation	Quiz 9
9-2	T	11/2/10	State Space Controller Design	HW 9
9-3	R	11/4/10	<i>Midterm 3 – up through lecture 9-1</i>	
	F	11/5/10	<i>Lab 9 - Inverted pendulum state variable feedback</i>	Prelab 9
10-1	M	11/8/10	State Space Observer Design	
10-2	T	11/9/10	Integral control, Integrated Full-State Estimation and Feedback	Quiz 10
10-3	R	11/11/10	Final Exam Review	HW 10
	F	11/12/10	<i>Lab 10 – Integral Control and Observers – State Variable Feedback</i>	