

Syllabus

Week of	Week	Pre Lab Lesson	Lessons	Topic
8/21	1	None	1a	Complex Number Review
			1b	Block Diagrams
			1c	Introduction to the Frequency Domain
8/28	2	2	2a	Basic Element Types and Energy Domains
			2b	First Order Transfer Functions
9/4	3	3	3a	Input Types and the Final Value Theorem
			3b	Second Order Systems' Time Responses
9/11	4	4	4	Second Order Time Response Calculations
9/18	5	5	5a	Graphical Analysis of Second Order Responses
			5b	Measurement of an Actual Second Order Response
			5c	Modeling the F/A-18 Landing Gear
9/25	6	None	None	EXAM #1
10/2	7	6	6a	Introduction to Feedback
			6b	Introduction to Controllers
10/9	8	7	7	Feedback and Modeling a Gun Turret
10/16	9	8	8	Disturbances and Actuator Limitations
10/23	10	9	9	PID Control of a Generator Set
10/30	11	10	10	PID Control of a Cruise Missile and Discrete Sampling.
11/6	12	11	11	PID Speed Control of a Car (Hardware Lab)
11/13	13	None	None	EXAM #2
11/20	14	None	None	Thanksgiving Holiday
11/27	15	None	None	Final Project Due and Course Critiques

Due Dates

Pre lab assignments are due at the **start of class** for the week listed.

The lessons should be completed in class the week they are assigned. To receive credit for them they must be handed in prior to the start of the following class. If you miss a class you have two weeks to be caught up unless other arrangements are made.

Grading

Your final grade is based on the following.

Exam #1: 30% Exam #2: 50% Final Project: 20%

Additionally, your final grade will be lowered by 3% for each incomplete pre-lab and 6% for each incomplete lesson.

Final projects are graded as: Satisfactory (100%), Marginal (60%), or Unsatisfactory (0%).