

EMM 302**Controls****3 Credits**

Instructor: Professor Horizon Gitano

Objectives:

The students should attain a fundamental understanding linear control systems, component modeling, block diagrams, Proportional, Integral and Differential controls, feed back loops. Students will be required to perform calculations relating to system response to various types of inputs, and simplify complex systems to conform to the linear tools taught in this class.

Primary Text Book:

Richard Dorf, Robert Bishop, "*Modern Control Systems*", Pearson - Prentice Hall

Additional Reference Books:

Benjamin Kuo, "Automatic Control Systems", Prentice-Hall

Course Work Grading (for Horizon's half of the course only):

Test		50% Total	(Test will be held in normal classroom)
Homeworks (5)	10% each	50% Total	(HWs due 1 week from assignment date)

Also Note: **PLAGIARISM = FAIL**. If you are caught copying you will fail the class.

Co**urse Outline (Chapter numbers refer to Dorf and Bishop):****Week 2-4**

CH2	Models
	La Plaz Transforms
	Block diagrams
	PID Controllers and System Response

Week 9

CH7	Root-Locus Method
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Week 10-12

CH6	Stability
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