

Spring Semester, 2004. 4 Hours. LECD: 0500-0730 W, 105 TH

SYLLABUS

Catalog Description:

Modeling and analysis of mechanical systems. Performance specification and evaluation. Modern control system design and analysis techniques. Real-time computer control of engines, manufacturing processes, bio-mechanical systems. Prerequisite: ME 412 or consent of the instructor.

Required Textbooks:

Feedback Control of Dynamic Systems, 4/E, Gene F. Franklin, J. David Powell, Abbas Emami-Naeini,
© 2002 / 0-13-032393-4 / Prentice Hall, 2002

Digital Control of Dynamic Systems, 3/E, Gene F. Franklin, J. David Powell, Michael L. Workman,
© 1998 / 0-201-82054-4 / Prentice Hall, 1998

Instructor:

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Topics:

Signal Flow Graphs, Mason's Gain Formula, Canonical Forms, State Variables, Similarity Transforms, Time Domain Solution, Controllability, ...