

**ECSE-6420 – NONLINEAR CONTROL
SPRING 2006**

Instructor: Dr. Murat Arcaç (Office: JEC 6028, Tel: x6535, Email: arcakm@rpi.edu)

Room and Hours: SAGE 2715 / Monday, Thursday; 2:00-3:20 PM

Office Hours: Monday 3:30-5:00 PM, or by appointment

Textbook: Khalil, Nonlinear Systems, Prentice-Hall, 2002, 3rd Edition

Books on Reserve in the Main Library:

1. Vidyasagar, Nonlinear Systems Analysis, Prentice-Hall, 1993, 2nd Edition
2. Sastry, Nonlinear Systems, Springer, 1999
3. Wiggins, Intro. to Applied Nonlinear Dynamical Systems & Chaos, Springer, 1990
4. Isidori, Nonlinear Control Systems, Springer, 1995, 3rd Edition
5. Isidori, Nonlinear Control Systems II, Springer, 1999
6. Krstic et al., Nonlinear and Adaptive Control Design, Wiley, 1995
7. Sepulchre et al., Constructive Nonlinear Control, Springer, 1997

Grading:	Homework:	25%
	Midterm:	25%
	Final Exam:	35%
	Project:	15%

Homework: Assigned weekly. 20% penalty for each session late. Submission will **not** be accepted if more than two sessions late.

Midterm: In-class. **March 6, Monday, class time.**

Final: Time and location to be announced.

Solutions: Solutions to homework sets and tests will be available at Course Reserves in the library, and through the library Web site.

Prerequisite: ECSE-6400 – Systems Analysis Techniques

Tentative Outline:	Week 1:	Ch. 1 and 2
	Week 2:	Ch. 3.1-3.2
	Week 3:	Ch. 4.1-4.2
	Week 4:	Ch. 4.3-4.4
	Week 5:	Ch. 4.5-4.6
	Week 6:	Ch. 4.7-4.9
	Week 7:	Ch. 5
	Week 8:	Ch. 6
	Spring Break	
	Week 9:	Ch. 7
	Wks 10-11:	Ch. 13
	Wks 12-13:	Ch. 14
	Week 14:	Ch. 11
	Week 15:	Project Presentations

No class: February 20 (Presidents' Day); March 13-17 (Spring Break); May 4-5 (Study-Review Days).
The February 20 class will be held on February 21, Tuesday.