Instructor

Name: Ratnesh Kumar

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Office Hr: MW 3-4PM, 3217 Coover

Class hr: TR 9:30-10:45 AM, 204 Marston

Texts:

1. *Nonlinear Systems*, by H. K. Khalil, Prentice Hall, 3rd Edition, 2002.

2. (Reference:) *Mastering Matlab*, by D. Hanselman and B. Littlefield, Prentice Hall, 2001 (http://www.eece.maine.edu/mm/).

3. Other Web Resources:
   Mathworks (MATLAB): http://www.mathworks.com

Course Description:

1. Introduction (Chapter 1)

2. 2nd Order Systems (Chapter 2)

3. Fundamental properties (Chapter 3)

4. Lyapunov Stability (Chapter 4)

5. Input-output Stability (Chapters 5)

6. Passivity (Chapter 6)

7. Frequency Domain Analysis of Feedback Systems (Chapter 7)

8. Feedback Control (Chapter 12)

9. Feedback Linearization (Chapter 13)

Grading Scheme:

- There will be four in class midterm exams; the dates will be announced later. Make-up exams will be given only for unanticipated events (medical, emergency travel, etc.); adequate documentation should be provided to the instructor.

- Home works (which will include matlab exercises) will be assigned on a weekly basis. They will be due a week later (typically on a Thursday). No late submission will be allowed unless a prior arrangement has been made.

- The overall distribution of grades is obtained as:

Home works:	20%
Midterms:	80%
Total:	100%

- Final letter grade will be assigned based on class score distribution.