

ECEN 4413 Controls II Fall 1997



<u>Time</u>: Monday/Wednesday/Friday 11:30AM-12:20 PM

Place: Engineering South 201B

Prerequisite ECEN3413-Controls I or ECEN3713-Network Analysis

Text: Linear Control Systems, McGraw-Hill, 1993

Charles E. Rohrs, James L. Melsa and Donald G. Schultz

References: Automatic Control Systems, Prentice-Hall, 1995

7th Edition, Benjamin C. Kuo

Modern Control Systems, Addison Wesley, 1995 7th Edition, Rchard C. Dorf and Robert H. Bishop Modern Control Engineering, Prentice-Hall, 1997

3rd Edition, Katsuhiko Ogata

Instructor: Professor Gary G. Yen,

http://www.okstate.edu/elec-engr/faculty/yen/yen.html 744-7743, gyen@master.ceat.okstate.edu

Engineering South 202

Office Hours: Monday/Wednesday 3:00-5:00 PM

or by appointment only

<u>Objectives</u>: To study the fundamental theory of linear control systems

through mathematical analysis and numerical simulation.

The topics include

- review of mathematical tools
- model representations
- feedback control system
- time response
- frequency response
- stability
- root locus method
- control system design
- digital control system

Grading: 8 Weekly Homework Assignments 20%

9/3, 9/10, 9/17, 10/8

10/15, 10/27, 11/19, 11/26

Design Project (November 5) 30% Midterm Exam 1 (October 1) 20% Midterm Exam 2 (November 12) 20% Final Exam (December 16) 30%

Note: All exams are open book and class notes.

You may use any references that may desire during exams.