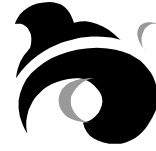




ECEN 4413
Automatic Control Systems
Spring 2004
Syllabus



<u>Time:</u>	Tuesday/Thursday 3:30-4:45 PM
<u>Place:</u>	Engineering South 214A
<u>Prerequisite:</u>	ECEN3413-Controls I or ECEN3713-Network Analysis
<u>Text:</u>	<i>Automatic Control Systems</i> , John Wiley, 2003 8th Edition, Benjamin C. Kuo and Farid Golnaraghi
<u>References:</u>	<i>Linear Control Systems</i> , McGraw-Hill, 1993 Charles E. Rohrs, James L. Melsa and Donald G. Schultz <i>Modern Control Systems</i> , Addison Wesley, 1995 7th Edition, Richard C. Dorf and Robert H. Bishop <i>Modern Control Engineering</i> , Prentice-Hall, 1997 3rd Edition, Katsuhiko Ogata
<u>Instructor:</u>	Professor Gary G. Yen, Engineering South 404 http://www.okstate.edu/elec-engr/faculty/yen 405-744-7743, 405-744-9198 (fax), gyen@okstate.edu Office Hours: Tuesday/Thursday 9:00AM-12:00PM; or by appointment only
<u>TA:</u>	TBD (weekly homework help session)
<u>Objectives:</u>	To study the fundamental theory of linear control systems through mathematical analysis and numerical simulation. The topics include <ul style="list-style-type: none">• review of mathematical tools• model representations• feedback control system• time response• frequency response• stability• root locus method• control system design• digital control system
<u>Grading:</u>	10 Weekly Homework Assignments 20% Tentative schedule- 1/22, 1/29, 2/5, 2/12, (before the first midterm) 3/2, 3/9, 3/23, 3/30, (before the second midterm) 4/15, 4/22 Computer Simulation Project 10% Midterm Exam 1 (February 24, 3:30-5:00 PM) 20% Midterm Exam 2 (April 8, 3:30-5:00 PM) 20%

Final Exam (May 4, 2:00-3:50 PM)

30%

A-88% above; **B**-76%-88%; **C**-66%-75%; **D**-56%-65%; **F**-55% below

Note:

All exams are open notes, but close book.

Drop and Add:

The instructor will follow University, College and Departmental guidelines for drops and adds. Consult the class schedule book or Ms. Helen Daggs in Engineering South 202 for more information.

Attendance:

Attendance record will be sampled randomly and will be counted toward your grade. Students will be expected to attend class. Habitual failure to do so will result in a reduced grade. Class attendance is taken occasionally for reference.

An incomplete grade will only be given when a student misses a portion of the semester because of illness or accident. All (I) grades must be completed within thirty days.

Academic Dishonesty:

Cheating on homework, quizzes or examinations, plagiarism and other forms of academic dishonesty are serious offenses and will subject the student to serious penalties.

On the first instance of academic dishonesty, the student will receive a grade of zero for the assignment, quiz or examination, and a letter will be placed in the student's academic file. The second instance will result in a grade of "F" for the course.

Disability Impairment:

If any member of the class feels that he/she has a disability and needs special accommodations of any nature whatsoever, the instructor will work with you and the University Office of Disabled Student Services to provide reasonable accommodations to ensure that you have a fair opportunity to perform in this class. Please advise the instructor of such disability and the desired accommodations at some point before, during, or immediately after the first scheduled class period.

Class Website:

You are advised to check class website at <http://www.okstate.edu/elec-engr/faculty/yen/spring04.html> regularly for important information, such as handouts, homework assignments, schedule changes, old exams and etc.