SYLLABUS
EE 4314 Control Systems (Section 601)
Summer 2003
T R 10:30am-12:20pm
Room 110 NH

Instructor: Kai S. Yeung
Office: Room 524 NH
Office Hours: M W 10:00-11:30am
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Course WWW site: http://www.ee.uta.edu

Required Textbook(s): Modern Control Systems, 9th Edition, R. C. Dorf and R. H. Bishop,
Addison-Wesley, 1998

Course Description: Analyses of closed loop systems using frequency response, root locus,
and state variable techniques. System design based on analytic and
computer methods.

Prerequisites: Linear systems theory
Laplace transform
Differential equations
Difference equations
Electrical circuits
Mechanical systems

Course Learning Goals/Objectives: To introduce the basic concepts and methods needed to
model, analyze, design and simulate single-loop feedback
control systems. Student successfully completing this
course will be able to apply appropriate mathematical
techniques to the analysis and design of feedback
control systems. Moreover, students will gain the ability to
use computer-aided design tools and acquire knowledge
necessary to stay abreast of developments in the field.

Course Content: Modeling of physical dynamic systems
Block diagrams
Signal-flow graphs
Specifications of feedback system performance
Steady-state performance of feedback systems
Stability of feedback systems
Root-locus method of feedback system design
Frequency-response methods
Nyquist's criterion of feedback loop stability
Bode design method
Design using classical compensators
State variable feedback

Attendance and Drop Policy: Students are NOT ALLOWED to drop after the last drop date
publicized on the UTA webpage.

Course Requirements, Evaluation & Final Grade:
Examinations: Three exams will be given, including the final exam. All three exams carry equal
weights. One exam grade will be dropped, and only two exam grades will contribute to the term
grade.
Exam times and dates: Exam I: Tuesday, July 1, 2003, 10:30am-12:00noon.
Exam II: Thursday, July 31, 2003, 10:30am-12:00noon.
Final Exam: Tuesday, August 12, 2003, 10:30am-12:00noon.
(If an exam is canceled due to inclement weather or other unexpected reasons, it will take
place in the subsequent scheduled class time and place. Pictured I.D. is required to take an
exam. No borrowing of items including calculators, erasers are allowed in an exam.)
Homework: About six assignments will be given. All assignments have to be turned in on time.
Homework grades will be used for borderline considerations.
Projects: Two computer simulation assignments will be given. They account for 10% of the term
grade.
Missed Exams: Missed exams will be assigned a grade of 0%.
Make-up Work: No makeup exams or makeup works will be given.
Incomplete Grade: No grade of "Incomplete" will be given.

Student Evaluation of Teaching
Evaluation forms will be given to the students at the end of the semester.

Americans with Disabilities Act:
The University of Texas at Arlington is on record as being committed to both the spirit and letter of federal
With the passage of new federal legislation entitled Americans with Disabilities Act – (ADA), pursuant to
section 504 of The Rehabilitation Act, there is renewed focus on providing this population with the same
opportunities enjoyed by all citizens.
As a faculty member, I am required by law to provide "reasonable accommodation" to students with
disabilities, so as not to discriminate on the basis of that disability. Student responsibility primarily rests
with informing faculty at the beginning of the semester and in providing authorized documentation
through designated administrative channels.
If you require an accommodation based on disability, I would like to meet with you in the privacy
of my office, during the first week of the semester, to make sure you are properly accommodated.

Academic Dishonesty
It is the philosophy of The University of Texas at Arlington that academic dishonesty is a completely
unacceptable mode of conduct and will not be tolerated in any form. All persons involved in academic
dishonesty will be disciplined in accordance with University regulations and procedures. Discipline may
include suspension or expulsion from the University.

"Scholastic dishonesty includes but is not limited to cheating, plagiarism, collusion, the submission for
credit of any work or materials that are attributable in whole or in part to another person, taking an
examination for another person, any act designed to give unfair advantage to a student or the attempt to
commit such acts." (Regents' Rules and Regulations, Part One, Chapter VI, Section 3, Subsection 3.2,
Subdivision 3.22).

ANY CHEATING WILL RESULT IN SEVERE PENALTIES.
The University of Texas at Arlington supports a variety of student success programs to help you connect
with the University and achieve academic success. They include learning assistance, developmental
education, advising and mentoring, admission and transition, and federally funded programs. Students
requiring assistance academically, personally, or socially should contact the Office of Student Success
Programs at 817-272-6107 for more information and appropriate referrals.