

PRAIRIE VIEW A&M UNIVERSITY
COLLEGE OF ENGINEERING
DEPARTMENT OF ELECTRICAL AND COMPUTER ENGINEERING

ELEG 4073
Servomechanics and Control Systems (3 credit hours)
Spring 2019

Instructor: Dr. Matthew N. O. Sadiku
Regents Professor and IEEE Fellow
Office: Electrical Engineering Building, Room 328
Phone: (936) 261-9906
Fax: (936) 261-9930
Email: sadiku@ieee.org or mnsadiku@pvamu.edu
Office Hours: MF: 11am – 1pm, WTh: 12noon-2pm

Textbook: N. S. Nise, “Control Systems Engineering,” Wiley, 7th edition, 2016.

References: (1) B. C. Kuo, “Automatic Control Systems,” Prentice Hall, 7th ed.
(2) R. C. Dorf and R. H. Bishop, “Modern Control Systems,” Prentice Hall; 10th ed.

Catalog Description:

Model of physical systems, system responses, system characteristics, stability design, frequency response analysis and design, discrete-time systems.

Topics to be covered:

1. Introduction
2. Modeling in the frequency domain
3. Modeling in the time domain
4. Time response
5. Reduction of multiple subsystems
6. Stability
7. Steady-state errors
8. Root locus techniques
9. Design via root locus
10. Frequency response techniques

Grading Policy:

4 out of 5 quizzes	40%
1 Project	10%
Midterm Exam	25%
Final Exam	25%
Total	100%

A: 90 – 100%, B: 80 – 89%, C: 70 – 79%, D: 60 – 69%

Exam Policy:

Every student must take all exams on the assigned dates. Any student who misses an exam without a valid excuse will automatically receive zero for that exam.

Class Attendance:

PVAMU requires regular class attendance. Attending all classes supports full academic development of each student. Excessive absenteeism may result in a student's course grade being reduced to a grade of "F". Accumulation of one week of unexcused absences constitutes excessive absenteeism.

Textbook Policy:

Students are required to purchase the textbook recommended for the course. If the student has not purchased (show proof of purchase) the textbook by the 10th class day, the student will be dropped from the course. Students may apply to the College of Engineering for a textbook loan. Applications are available on the college website under student resources.

Attendance Policy:

See University Class Attendance Policy.

Students with Disabilities:

Students with disabilities who believe they need an adjustment in this class, are encouraged to contact the Office of Disability Services at (936)857-2610/2620 as soon as possible. Once you have received a letter of adjustment from the office, kindly make an appointment with me to discuss appropriate adjustments for this class.

Please turn off your cell phones when you are in class